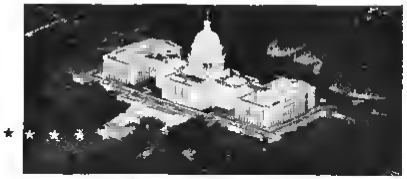
Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC. DEC. 10, 1945

Light Transport: *New photo of Beech Aircraft Corp.'s Model D18S, successor to its pre-war 6-11-place transport. With gross weights ranging between 8,500 lb. and 9,000 lb., the plane cruises at about 188 mph., with a high speed at 5,000 ft. of around 225 mph. Another variation of the aircraft, the Model D18C can operate at a gross weight of 9,450 lb., with a cruising speed at 5,000 ft. of 208 mph. with 65 percent of power.*

Washington Observer



AIR TRANSPORT COMMAND—Despite a prospective cut to one-sixth of peak production, the ATC will continue to be the world's biggest airline throughout 1946. Operational levels for June 30, 1946, call for ATC to have in operation approximately 500 transports flying over 75,000 route miles, emanating from 75 bases throughout the world and serviced by 80,000 personnel. At peak operation just before the end of the war, ATC was operating 3,000 planes. Army regards ATC as a permanent fixture.

* * *

WILLOW GROVE—Whether or not there is overall consolidation of the War and Navy Departments, the Navy's Bureau of Aeronautics is planning a separate and permanent naval aeronautical experimental center at Willow Grove, Penna. Somewhat similar to Army's Wright Field, Willow Grove would be a consolidation of the scattered experimental stations such as Patuxent, Md., and some of the research and experimental facilities at the Naval Air Station at Anacostia, D. C., and some of those within the Navy Department headquarters in Washington. Navy aircraft officials are proceeding with plans on the premise that any consolidation will not attempt to unify design, engineering and experiment.

* * *

BRITISH PRODUCTION—British military production for next year, approximately 8,000 aircraft—about four times that of U. S. schedules, does not indicate any concentration on existing types as opposed to guided missiles. All it actually indicates is that Britain is not in a financial position to continue the purchase of U. S. built trainers. During the war, all trainers used in Britain were of U. S. manufacture. Therefore, greatest military production probably will be in the trainer class.

SURPLUS PRECEDENT—There are indications that a precedent may have been established in a recent Surplus Property Administration order which delegates authority to the Union of South Africa War Stores Board to dispose of some surplus, including aircraft in the Union, providing certain provisions are followed: These are that the State Department may withdraw any sales, that they must go to the State Department for prior approval or disapproval, and that no sales can be re-exported to the United States and that gross proceeds must be paid promptly to the State Department. While there are comparatively few surplus aircraft in that area, the order may be the forerunner of a trend in surplus disposal, including the sale of lend-lease equipment.

* * *

AIR CORPS RESERVE—A War Department release labeled "Announces post-war plans for Air Corps Reserve" lists no figures on planes or men, saying simply that "the size and efficiency with which this civilian component of the AAF will operate will depend upon the amount and quality of proficiency training that can be provided by appropriations allotted for post-war training purposes." Further that "the number of operational planes required will be determined to insure the accomplishment of the post-war Air Reserve mission." All of which means, of course, that our post-war air force and its civilian component is up to Congress.

* * *

AIR-COOLED NAVY—Fleet Admiral King, in his third and final report to the Secretary of the Navy states that "it can be claimed without exaggeration that the air cooled aircraft engine of today would not have been developed effectively had it not been for the Navy's continued interest."

A Boeing B-17G converted to commercial use in Sweden for Swedish Air Lines

AVIATION NEWS

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Published weekly by McGraw-Hill Publishing Co., Inc. Price 50c a copy. Allow ten days for change of address. Subscription rates — United States, Mexico and Central and South American countries, $5 a year, $8 for two years, $10 for three years. Canada, $6 a year, $10 for two years, $12 for three years. All other countries $9 a year, $14 for two years, $18 for three years. Entered as second-class matter July 31, 1943 at the Post Office at New York, New York, under the Act of March 3, 1879. Printed in U. S. A. Cable Address "McGrawhill, New York." Please indicate position and company connection on all subscription orders. JAMES H. McGRAW, Founder and Honorary Chairman; JAMES H. McGRAW, JR., President; CURTIS W. McGRAW, Senior Vice-President and Treasurer; HOWARD EHRLICH, Vice-President (for business operations); WILLARD CHEVALIER, Vice-President (for editorial operations); JOSEPH A. GERARDI, Secretary; and J. E. BLACKBURN, Jr., Director of Circulation. 330 West 42nd Street, New York 18, N. Y. Branch offices: Chicago, 520 North Michigan Ave.; San Francisco, 68 Post Street; Los Angeles, 621 So. Hope Street; Aldwych House, Aldwych, London, W. C. 2; Washington; Philadelphia; Cleveland; Detroit; St. Louis; Boston; Atlanta. Return Postage Guaranteed. Copyright 1945. All rights reserved by McGraw-Hill Publishing Co., Inc.

Volume 4, Number 20

Advertisers Index

News at Deadline

Hearings Scheduled

Hearings will start Dec. 12 on the revised Fulbright Bill, to establish an Office of Technical Services within the Department of Commerce, consolidating several similar or related scientific agencies of the government. Purpose of the legislation is to stimulate and encourage technological research and development activities and their application to business, industry and commerce.

NAA Favors Unification

The National Aeronautic Association publicly went on record late last week in favor of unification of the armed forces under a department of national defense with separate branches for land, sea and air, and President William R. Enyart called on NAA's 18,000 members to enlist local support for unification legislation pending in Congress.

This puts the nation's oldest and largest aeronautical organization actively in the fight for a single defense command. Another group which recently has begun a "grass roots" campaign to attain the same objective is the Aeronautical Training Society, the members of which conducted all AAF primary flight training during the war.

Industry Optimistic

Despite the contraction in aircraft production since V-J Day, industry leaders believe they will be able to stay abreast of the many new scientific discoveries affecting aviation and that the new developments eventually would provide a healthy expansion for the industry.

The declaration was made in a statement issued at the annual meeting of the Aircraft Industries Association in Los Angeles by Donald W. Douglas, chairman, and E. E. Wilson, president, of the manufacturers' national organization.

The future will be determined not only by success in development of scientific discoveries but also by the extent to which Congress and the American people recognize the importance of such development work, they said.

▶ Military aircraft output in November dropped to 267, against an October total of 470. Included were 13 bombers, 158 fighters, 27 transports, no trainers, five liaison or communications, 46 special purpose robots, and seven gliders. The bombers comprised 3 B-29's, 4 PBM's, 5 PV2's and 1 experimental Beech twin engine XA-38. Transports comprised 3 C-54G, 3 C-82, 20 C-47B and 1 RY3.

▶ Wright Aeronautical Corp. has leased from RFC the government-owned plant at Woodridge, N. J., which it operated during the war to fill AAF contracts. The lease is for five years, with an option to purchase.

▶ Industry reports indicate preparations by the AAF for attempts to set new transcontinental speed records by three Lockheed P-80's sometime this month.

▶ Surplus Property Administrator Symington is informing fixed base operators and other lightplane dealers that SPA will be willing to set up an advisory committee on surplus sales problems for aircraft if there is a demand for it by the industry. SPA's attitude is that sales are continuing satisfactorily, with few problems remaining to be ironed out.

▶ Arthur Boreman, well known chairman of CAA's Non-Scheduled Flying Advisory Committee and publisher of the Dry Goods Journal, will be associated with his two sons, returning Army veterans, in a new monthly aircraft sales and service magazine to be launched shortly after the first of the year.

▶ Northeast Airlines becomes the 11th airline to announce a 40-hr. week. Others are American, American Overseas, Braniff, Eastern, MCA, Northwest, Pan American, PCA, TWA and United. Take-home pay remains unchanged.

▶ The air transport industry was asked to take over major responsibility from the ATC for transporting army veterans from the west coast because of the Transport Command's fear of accidents. One result of the large number of discharges of experienced AAF pilots is a rising crash rate in recent months. The current delicate situation relative to Army-Navy unification was an additional reason the Army wished to take no chance on unfavorable publicity.

▶ Aeronautical Securities Research Corp., 115 Broadway, New York, has filed a certificate of voluntary dissolution.

▶ Airports, Inc., a new Baltimore firm, will announce plans about the first of the year to construct a chain of suburban airparks or small airports. The company is understood to have sound financial backing and engineering know how.

▶ Washington sources say Douglas officials hope to work out an RFC arrangement to consolidate commercial company business at the Santa Monica plant, which it would buy, and withdraw commercial operations from the El Segundo facility which it would lease from RFC for whatever naval and military contracts develop.

▶ An approved type certificate for the Globe *Swift* is expected in a few days.

▶ Engineering & Research Corp. officials hope to reach this week an output rate of three *Ercoupes* a day.

▶ United Air Lines is studying five twin-engined transport designs for short haul services: the Martin 202, whose mockup was visited by President Patterson last week, the Douglas DC-8, Consolidated 110, Curtiss CW-20, and preliminary Boeing sketches. All would accommodate from 30 to 40 passengers, and cruise from 220 to 250 mph.

▶ In an effort to end the bitter airport controversy between PAA subsidiary, Compania Mexicana de Aviacion, and Aerovias Braniff, the Mexican government may take over private airports shortly if legislation can be passed. Meanwhile, Mexico City correspondents report Aerovias Braniff has released 165 of 250 personnel, with indications that only the present system plus a route to Acapulco will be flown.

VOLUME 4 • NUMBER 20

Aviation News

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December 10, 1945

Predicted Obstacles to Expansion Of World Air Transport Arise

Pan American's joust with Britain over rates reflects Europe's fear of U. S. economic penetration and is traceable to failure of Chicago conference.

America has begun to encounter the predicted obstacles to expansion of world air transport. That is the meaning of Pan America Airways joust last week with the United Kingdom on rates and number of trips.

The obstacles are arising out of Europe's apparent fear of American dominance of the airways and her determination to protect her economy and markets from American economic penetration she feels injurious to her interests.

▸ **Basis**—The causes are traceable to failure of the Chicago conference a year ago to produce international machinery, set up by multilateral agreement, to govern operation of international air services.

The result has been a scramble for bilateral agreements on air rights which, however high the motives of the parties involved, inevitably must be restrictive and productive of contraction rather than expansion of air commerce.

Last week's development occurred as America and Britain were trying to work out agreement covering at least an interim period of transatlantic flights.

▸ **Outline** — Facts in the current situation seem to be these:

▸ At Chicago, because of American overreaching and British stubbornness, no agreement was possible covering international rates, frequencies and traffic quotas. The result was that these matters are to be determined in bilateral agreements so that there will be freedom-of-the-air in some areas of the world, gradations thereof in others and tight restrictions in still others.

▸ At Montreal, the International Air Transport Association in October set up machinery whereunder the carriers themselves agreed to negotiate on rates to eliminate the rate war so much feared by America's foreign competitors.

▸ Although Pan American contributed to the unanimous vote in Montreal, she dropped a bomb on the conference by announcing a $275 fare to London just as other operators, equally competent to judge operation costs and reasonable profits, were saying that $375 was the minimum for present equipment.

▸ After Montreal, Anglo-American government talks began in which America proposed a permanent agreement covering all phases of air transport including the controversial fifth freedom and Britain countered with a proposal that for the moment a working arrangement be devised covering only number of trips and rates.

▸ At this point Pan American's new rate went into effect and Britain promptly ordered the airline to confine itself to the two flights a week allowed under the 1937 Anglo-American agreement.

▸ The State Department, powerless to fix rates, left the matter up to Pan American which raised its fare to $375, but only after a suitable interval in which American public indignation was aroused.

▸ American Overseas, meanwhile, was operating five flights a week to Britain at $572. After British sources had said it was "bad form" but so long as the rate was satisfactory they would permit it pending a working agreement, it became plain that American just announced that it was going to Britain and went.

▸ This must have suited Pan Amer-

ROADABLE 'GIRO CROSSES POTOMAC:

The ten-year-old Pitcairn roadable autogiro, built on Commerce Department order in 1935 as an experiment, gave another demonstration of its ability to move through traffic-crowded Washington streets last week, as it made a ten-mile ground trip from the freight yards to Washington National Airport. There it will be stowed by CAA in a hangar until enlargement of aviation exhibit accommodations at the Smithsonian Institution makes a place for it there. The 'giro, with John Geisse, CAA private flying consultant at the controls, is shown as it crossed the crowded 14th Street bridge en route to the airport. The 'giro's 90-hp. Pobjoy engine is geared to drive the tail wheel while the occupant steers the front wheels with pedals. When the 'giro was first delivered in 1935 it landed on a small grassy plot near the Commerce Building and taxied around Washington streets.

ican for it gave it all it needed by way of argument that one line was being played off against the other, a situation calling for a chosen instrument.

▸ Senator Pat McCarran came forth with a new version of his previously offered All-American Flag Line bill.

It was obvious that H. J. Symington, IATA president, was right when he warned delegates to IATA and the Provisional International Civil Aviation Organization that the present bilateral bickering would be disastrous. It was the direct result of Chicago's failure and there was no evidence at week end that PICAO in Montreal was acting with any speed to succeed where Chicago did not.

▸ **Report**—There were other developments impinging upon the American-British and general American-European aviation situation last week. (1) The Civil Aeronautics Board was to consider the IATA traffic conference agreement, filed by American participants. (2) A majority of the Senate Commerce Committee made public a "report" strongly prochosen instrument, emphatically urging domestic routes for Pan American as a second choice. A minority report, signed by Chairman Josiah W. Bailey and five members, said the majority might have some effect but none "creditable to the committee."

At the same time it appeared that Transcontinental & Western Air, about to begin scheduled services to France, had reached an understanding with Air France on operations. This might give Pan American a new argument that a foreign country is playing off one American company against another, since Pan American was resisting State Department suggestions that it, too, talk with Air France.

▸ **Negotiating**—America and France were negotiating a general commercial aviation agreement and, because this government could give few if any guarantees on rates, the agreement was being delayed.

Regarding CAB consideration of the IATA agreement, it appeared that Board approval, if given, would strengthen this government's hand considerably, for then there would be some assurances to other international carriers on rates.

▸ **Explanation**—In explaining why it raised its rate, Pan American took occasion to say that rate setting by IATA "is illusory since IATA acts only by unanimous vote and either American Airlines System or British Overseas Airways Corp. could block the rate reductions proposed by Pan American." As a matter of practice, however, it was believed the line that proposed the lowest rate, and could justify it from the cost plus profit standpoint, would have its way.

But Pan American hit hard in another portion of its statement claiming that its $275 figure was an 8-cent per mile rate which "is higher than the rate which American Airlines quoted to the Civil Aeronautics Board a year ago, when seeking a certificate to operate to the United Kingdom, as the rate to be made effective with the same equipment now being used both by it and by Pan American."

▸ **Rates Undecided**—There seemed little doubt now that both Pan American and American soon would be operating seven flights a week while official Anglo-American negotiations continue.

The rate matter is still in the air, however, and may remain there until the North Atlantic traffic conference of IATA meets in January. It remains to be seen whether Pan American will join in the conference.

But there was one factor in the Anglo-American situation which might provoke Britain to greater receptivity to United States air proposal.

In the midst of negotiations for a $3,500,000,000 to $4,000,000,000 loan to Britain, it was recalled that the Colmer Committee of the House, after a visit to Europe, said Britain's opposition to freedom-of-the-air "seems to be a serious handicap to the expansion of American civil aviation . . . the committee feels that the Department of State should continue to make this (air rights) a primary objective of American policy and insist upon civil aviation rights for American air lines in return for the concessions which we are affording other nations."

The British loan will have to be approved by Congress where the House at least will closely follow the advice given by the Colmer committee.

HIGH ALTITUDE *LIGHTNING:*

This XP-49, a modified Lockheed P-38, was a secret of the AAF for more than two years. It was powered by special supercharged Continental engines which developed a total of 3,980 hp, 230 more than that of the Allisons carried by the P-38's built at the time. Top speed was 458 mph, weight loaded was 18,830 lb. Test pilots regularly flew above 40,000 ft. for high altitude research and proving of pressurization equipment.

AAF Research Funds Face Heavy Slash

The $245,000,000 research program drawn up by the AAF after V-J Day, to run to next July faces a sizeable reduction, it was evident as Congress approached completion of action on the first surplus appropriation rescission bill last week.

Conferees wrangled, but reached no decision on whether the Army's aviation research program is to be slashed to the $115,000,000 proposed by the Budget Bureau and the House, or scaled back to $200,000,000, as recommended by the Senate, in passing the rescission measure.

▸ **Navy**—The outlook for the Navy's aviation research program, however, was brightened when conferees agreed on the full $148,000,000 aviation research allocation sought by the Bureau of Aeronautics.

The Budget Bureau cutback of $87,000,000 in the Navy's aviation research allocation was rubber-stamped by the House, but reinstated in the Senate. The decision of conferees to accept the Senate figure still is subject to approval by the membership of both houses, however.

Standardized System Expected In Instrument Landing Dispute

Private flyers and segments of industry criticize CAA opposition to radar-based GCA method, charging "localizer" marker and glide path indicator operation is too complicated.

By WILLIAM KROGER

Adoption of a standard instrument landing system to aid private and commercial pilots alike is seen as the outcome of a now-familiar situation with private flyers and segments of the industry ranged against CAA, criticizing its instrument approach system as too complicated and fostered by that agency's conservative faction.

Focus of the difference in opinion is the Ground Control Approach (GCA) system developed for the military during the war and utilizing radar, as opposed to the older CAA system of "localizer" runway marker beacons and a glide path indicator, now being installed.

▸ **Operation**—GCA equipment is all on the ground, with aircraft containing only the usual radio receiver and transmitter, while the CAA system necessitates an additional instrument in the aircraft. With GCA, the ground operation "talks" a pilot in, it requires only the pilot's faith in the ground operators. The CAA system, in addition to the glide path indicator instrument, requires accomplished blind flying technique.

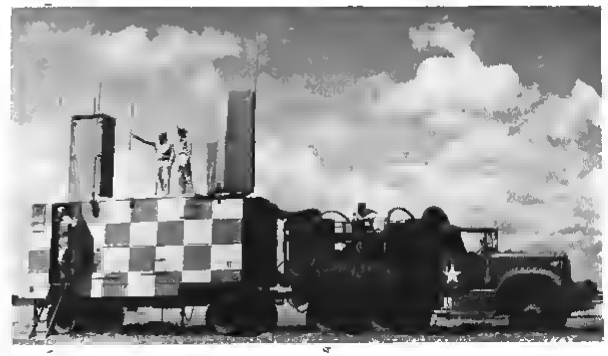
Therein lies one reason why GCA is not being adopted by CAA. According to one definition, GCA and the CAA system entail a "fundamental difference in philosophy." CAA maintains the pilot dislikes directions from the ground and would rather rely on his own knowledge and discretion. This claim was disputed at the recent Joint Private Flying Conference by Lt. Col. C. B. Sproul, chief of the technical development division for flight operations of the AAF. He said that of the thousands of AAF pilots using GCA during the war, the only ones who objected to instructions from the ground were the "moron" pilots.

▸ **Cost**—Another point in CAA's brief against GCA as primary equipment is cost. The CAA equipment, once installed, is completely automatic and requires only routine maintenance. GCA, on the other hand, requires a minimum of two highly-skilled operators. In practice, it has called for the service of more. The AAF GCA crew customarily is 16 men. In tests at its Indianapolis research center, CAA has been employing five men on GCA. During the war, AAF borrowed experienced traffic control men from CAA and trained them in the use of GCA. At the end of four days, Col. Sproul declared, two CAA men were landing planes every 60 seconds.

Regarding initial equipment costs, figures have not been stabilized. CAA has bought its equipment only in experimental quantities, prices of which are no guide. CAA's ground equipment—three fan markers and glide path transmitter varied between $60,000 and $70,000. The experimental glide path indicator for the airplane cost $100, but CAA estimates that in quantity these instruments would sell for as low as $10. The wartime price of GCA to the Army reportedly was about $370,000 per unit, another figure which presumably could be sharply reduced. Col. Sproul estimated that the CAA system would cost, installed, about $25,000, and GCA about $100,000.

▸ **Results**—As for results obtained with the contrasting systems, only data come from AAF experiments as reported by Col. Sproul. CAA has made no tests except with airline pilots. Sproul declared AAF tested 1,800 men on the CAA system and none could use it without intensive training. In another test, only two out of 100 pilots succeeded in making landings. Further, he said, the ATC tried to employ the CAA system and required five receivers, instead of merely the usual receiver and glide path indicator.

The CAA system has been developed by degrees from orthodox radio landing aids, the newest component being the indicator in the plane. A transmitter at the field sends out a glide path "beam."



Inside and Outside of GCA: *All of the war-developed Ground Control Approach system equipment is contained within this trailer, with power supplied from a generator on the truck. For commercial use, the equipment could be installed in control towers. Photo of the interior of the trailer shows the "final controller" (center) talking an aircraft onto the runway. At his left is the azimuth scope which shows the plane's position relative to the glide path, on his right is the elevation scope which indicates the plane's altitude in relation to the glide path.*

"GRIZZLY":

Termed the "Grizzly" by its makers, Beech Aircraft Corp., the XA-38 was designed for special attack work but never saw action. It has a high speed, designed gross weight of 29,900 lbs., span of 67 ft. and length of 51 ft. and carries a 75mm. cannon in its nose (below).

which is picked up by the plane. If the plane is on the correct glide angle, a light shows white; above the glide path, the light is green, below, it is red.

▸**Innovation**—GCA, on the other hand, is entirely a wartime innovation, developed at the Massachusetts Institute of Technology and first used operationally in September, 1943, at Elsham-Woldes Airdrome in England. It is based entirely on radar. As used by the Army Airways Communications System, the complete GCA installation is in a trailer, parked beside the runway 3,500 ft. from its downwind end.

Several radar scopes follow the plane at various distances from the field and in various attitudes in relation to the runway. The first to be used can follow the movements of all planes within a radius of 30 miles. The plane is landed by a "final director" who follows its course on an azimuth scope and an elevation scope. Generally, the aircraft breaks into the clear over the runway and the pilot makes the landing, but AACS operators have "landed" planes under "zero-zero" conditions.

▸**CAA Plans**—Because it feels a pilot resents instructions from the ground, CAA will not build its landing aids system around GCA, while admitting its efficacy. It plans to use GCA as a supplement in towers to enable traffic control

directors to know where all aircraft are in relation to the field, and to guide in aircraft not equipped with the glide path indicator instrument. CAA states that at the present time there is no GCA equipment adaptable for immediate civil use.

AAF Veterans Want Post-War Air Jobs

Aviation leads as a choice of occupation among members of the Army Air Forces interviewed in four cities by representatives of the Aeronautical Training Society. Of several hundred officers and enlisted men selected at random in Los Angeles, Atlanta, Birmingham and Washington, 31 percent hope to make careers in aviation.

Next favored was law—named by only seven percent.

▸**Engineering**—Greatest proportion of those planning aviation careers, 29 percent, desires places in aeronautical engineering. Aviation mechanics interest 22 percent, 21 percent wants to be commercial pilots and aeronautical radio, aerial photography, meteorology, etc., attract 28 percent.

A possible key to the acceptance of the personal type of aircraft as a means of transport is furnished by the fact that of the 36 percent of the entire group who anticipate owning a plane, the majority do not plan on careers in aviation. While 49 percent of the aviation career group hopes to own a plane, 57 percent of the total would-be aircraft owners will seek careers in fields other than aviation.

▸**Price Range**—A wide price range was indicated by those wanting planes, although the majority favor aircraft costing between $1,500 and $2,000.

Questions in the ATS survey pertaining to veterans' benefits under the GI Bill of Rights and other legislation revealed the interesting fact that only 20 percent of those wishing to become commercial pilots plan to use Federal assistance for additional training. It has generally been assumed that military flying is so different than that required commercially that veterans would have to take intensive refresher courses. Amendments to the GI Bill to make this partially possible are now pending in Congress. No surprise was occasioned by the decision of the majority of those wishing aeronautical engineering jobs to take training at government expense.

Airport Petition

Ten thousand signatures of Los Angeles County voters will be sought to convince the County Board of Supervisors Jan. 8 that it should adopt the Los Angeles Master Plan of Airports prepared by the Los Angeles County Regional Planning Commission.

Several hundred members of Southern California Chapter, National Aeronautic Association, will circulate the petitions.

AAF Ground Accident Survey Cites Need for Field Redesign

Office of Flying Safety report recommends consideration of airport planning from standpoint of eliminating many mishaps and making mistakes by ground controllers less likely.

In addition to the attempts to attain safety in flying by designing human errors out of airplanes, there should be some consideration given to designing airports so that mistakes by ground controllers would be similarly eliminated, it is suggested by the AAF Office of Flying Safety on the basis of a study of ground accidents at fields used by the Army.

During March and April of this year there were 201 accidents involving AAF aircraft attributable to the condition or use of airports. The larger proportion of these was due to collisions with other vehicles or obstructions on the fields.

▸**Airport Factor**—"If these accidents were to be considered singly, most could be charged to pilot error, or to the carelessness of supervisory personnel," the report states.

"However, the frequent recurrence and large number of such accidents strongly suggests that there are elements in the design of airports and in the way in which airports are operated which either are productive of accidents or fail to overcome the human tendency to error."

Eighty-two of the total ground accidents were charged to airport condition, with soft ground or mud, fences, culverts, etc, the primary factors. The remaining 119 accidents were due to collisions.

▸**Soil Care Needed**—The accidents blamed on airport condition perhaps indicate that greater attention should be given to soil stabilization. Mud, soft ground, snow, soft shoulders on runways accounted for 39 accidents, ditches, fences and culverts, 29, and fixed equipment such as wind tees, and boundary markers were factors in 14 accidents.

Examples of how design can be utilized to diminish chances of accidents seem plain in studying the figures of collisions on the ground. Of 47 collisions with "other aircraft in use," 21 involved taxiing aircraft. Students of air safety point out that such a large number of taxiing accidents probably indicate improper design, or absence of taxiing strips. This explanation would seem also to be true regarding 19 other collisions between landing and taxiing aircraft.

▸**Other Equipment**—During the two-month period examined, there were 28 collisions with parked aircraft, all but two occurring during taxiing. Here again, the weakness would seem to be in improper placement or lack of taxi strips with a corollary improper placement of parking areas.

Due more to mistakes of airport personnel than to design faults were 13 accidents involving collisions with moveable equipment. Trucks, tugs, and jeeps were moving or parked on runways or taxi strips. Allied to this class of accidents were 24 that occurred in taxiing or landing when pilots applied brakes too sharply to avoid collisions, resulting in nose-ups or groundloops.

▸**Prop Wash**—Seven accidents occurred to aircraft due to the prop wash of other planes.

On the basis of its study of ground accidents, the Office of Flying Safety proposes that, in carrying out a large-scale airport construction program, the responsible agencies should consider among others, the following points.

▸Whether the cost of accidents warrant expenditure of additional funds to stabilize runway taxiway shoulders, cover ditches and remove fences and embankments;

▸Effect of physical layout (intersecting runways, etc.) on traffic control and accidents;

▸Whether it is possible to conceive a design that will automatically separate moving traffic and remove parked aircraft a safe distance from runways and taxi strips.

FOREIGN REPRESENTATIVES AT CLINIC:

Nine aviation representatives of other nations were observers at the recent Third National Aviation Clinic at Oklahoma City. Left to right, front row, Lt. Col. Anatolly Y. Galkovsky, assistant military attache, USSR; Col. Mohammed Bey Abdel Halim Khalifa, air attache, Egypt, Group Capt. W. H. Garing, assistant to RAAF representative in Washington; Comdr. H. L. A. Van Der Kroef, Royal Netherlands Naval Air Service, Col. P. L. Li, acting chief, technical training and development, Chinese Air Forces; second row, Col. Alexander Hess, military and air attache, Czechoslovakia; Capt. Reider From, assistant air attache, Norway; Capt. Joel Petterson, assistant military air attache, Sweden; Lt. Col. Albert LaDousse, chief, air rearmament section, French Mission.

Lindbergh To Speak

The 42nd anniversary of the Wright brothers' first flight will be commemorated Dec. 17 by the Washington, D. C., Aero Club at a banquet at which Charles A. Lindbergh, now consultant to United Aircraft Corp., will be the principal speaker.

As part of the evening's ceremonies, the Frank G. Brewer Trophy for 1945 will be awarded for the most significant contribution to aviation education, and the winners of the Andrew J. Haire Airports Awards (AVIATION NEWS, Oct. 1) will receive their prizes. Honored guest will be the as yet unannounced winner of the Robert J. Collier Trophy, who will be presented his award by President Truman at the White House before the banquet.

'National Air Policy Board' Sought in Senate Resolution

Mitchell's measure calls for establishment of unit to study commercial and national defense aspects of aviation; Interstate Committee transportation investigation stalled.

On the eve of Senate action on legislation proposing a thoroughgoing investigation of transportation policy by the Senate Interstate Commerce Committee, Sen Hugh Mitchell (D, Wash.) introduced legislation last week for establismment of a "National Air Policy Board" to study commercial air transport policy and its relation to surface transportation, as well as the national defense aspects of aviation.

A resolution sponsored by Sen Ernest McFarland (D, Ariz.), authorizing Interstate Commerce's transportation investigation, was favorably reported from Senate Audit and Control Committee last week. Its consideration by the Senate was temporarily blocked by Sen Owen Brewster (R., Me.) who explained that he wanted to study the resolution before it was brought up for Senate action.

▸**Dispute Seen** — The McFarland resolution, authorizing Interstate to launch out into a far-reaching study of air transportation—foreign and domestic—as well as surface forms of transportation, is expected to provoke some jurisdictional opposition by Senate Commerce Committee zealously guarding its claim to all aviation matters Brewster is a member of Senate Commerce.

In addition to studying the promotion of commercial air transport development, the board proposed in the Mitchell bill would also study the air power requirements for the national defense.

▸**Scope**—In this respect, the bill embodies some of the recommendations made by several aircraft manufacturers for creation of an Air Policy Board, similar to the former Morrow Board.

The board would investigate air transportation and "its relation to the national defense and a national transportation system by water, highway, rail and air adequate to meet the needs of the commerce of the United States, both interstate and foreign."

▸**Agenda** — Eight matters which the bill stipulates as "musts" on the Board's agenda are:

▸Government policies that should be adopted to stimulate a healthy rate of technical progress in air transportation;

▸Coordination and organization of the military and naval air forces and government agencies concerned with aviation and transportation;

▸The size of peacetime air forces necessary to the national defense;

▸Maintenance of a properly balanced and expansible productive capacity of aircraft in peacetime;

▸The extent, if any, to which plans for future wartime expansion should rely upon peacetime aircraft production companies, and the extent, if any, to which such expansion should involve conversion of the automobile and other non-aircraft industries; the extent, if any, to which civil aviation and aircraft exports should support a peacetime military aircraft industry;

▸Suggestions for the conversion of aircraft production from a wartime to a peacetime basis, so as to assure the preservation of an aircraft production industry adequate to meet the transportation and national defense needs of the future;

▸Means of effectively utilizing new modes and improvements to existing modes of air transportation developed during the war;

▸The coordination, strengthening, and preservation of a national transportation system by water, highway, rail, and air adequate to meet the needs of the commerce of the United States, both interstate and foreign."

Round-World Flight

A 24,859-mile flight around the world in 96 hours and 50 minutes flying time has been completed by an Army crew in a Douglas A-26 attack bomber. The plane was piloted by Col. Joseph R. Holzapple.

It was flown westward by way of Hawaii, the Marianas, Okinawa, the Philippines, India, North Africa, the Azores and Bermuda.

Lodwick Discussed As Lovett Successor

Resignation of Robert A. Lovett as assistant secretary of War for air became effective last week as reports were current that his successor would be chosen from among those active now in aviation. A pilot in World War I, Mr. Lovett was in the banking business before taking up duties as special assistant to the secretary of

Robert A. Lovett

war in 1940. He was appointed assistant secretary in April, 1941.

▸**Lodwick Discussed** — Although speculation as to Mr. Lovett's successor mentioned several persons in the industry, considerable support appeared to be behind Albert I. Lodwick, Florida flight school operator who undertook several technical consultant missions for the AAF during the war and was recently awarded the Bronze Star in recognition.

Favorable House Action Seen On Profit Legislation

Favorable action is expected in the House on legislation lifting the 10 percent profit limitation on naval aircraft and shipbuilding contracts established by the Vinson-Trammell Act.

The legislation was introduced by Rep. Carl Vinson (D., Ga.) and now is pending before the Naval Affairs Committee of which he is chairman.

Members of Naval Affairs generally appear to feel that under competitive bidding, a 10 percent profit limitation on aircraft contracts no longer is necessary, and that the limitation should be lifted from experimental contracts.

Munitions Board Being Reorganized

Appointment of highly qualified civilian as chairman is under consideration.

By SCOTT HERSHEY

Reorganization of the Army and Navy Munitions Board is under way and serious consideration is being given to bring in a highly qualified civilian to act as chairman.

The Board is becoming concerned over public and official disregard of industrial preparedness in the stampede of the armed forces to demobilize and industry to reconvert.

Virtually no mention has been made in appropriation requests to Congress for any programs to maintain an inventory of industrial facilities for war purposes or t odevelop a program of assigning certain plants certain tasks in the event of an emergency.

Instead, emphasis is on hte conscription of men and maintenance of large military and naval establishments, research and development.

▸**Function**—One of the ANMB's principal functions is to make industrial and material preparations for war. Its stockpiling of scarce and strategic materials are relatively simple activities, compared to the task of preparing an industrial mobilization blueprint.

ANMB recalls the embarrassment at finding on the eve of the war that its M-Day plan was inadequate in respect to industrial preparedness. Industry itself made this discovery and the fact that an effective recuperation was made redounds to the credit of private industry.

▸**Coordinates**—Cognizant of these facts and this experience, the Board is reported on the look-out for a top-flight civilian chairman with wide industrial experience.

During the war, many agencies such as the War Production Board took over ANMB functions. It is an over-all policy agency and coordinates all procurement for the armed services.

▸It is probable that under the reorganization, the Board will be a much larger organization than it was during the war when many of the functions originally planned for it were taken away and delegated to the wartime agencies set up when production was shifted into high gear.

Navy 'Consolation Prize'

A "consolation prize" to advocates of a more dominant role for aviators in the Navy, after the appointment of Admiral Nimitz as chief of naval operations, was seen as one factor in the Navy reorganization announced last week by Secretary Forrestal.

Indicating his own personal belief in the place aviation should occupy in the Navy hierarchy and demonstrating that the air arm justified its exponents' faith during the war, Secretary Forrestal announced that hereafter air officers would fill half the top posts under the chief of naval operations, and that for the first time naval aviators would receive fleet commands. The positions of vice chief of naval operations, deputy chief for operations and deputy chief for air will be occupied by air officers.

Col. Love To Resume Presidency of AAF

Callery joins Lehman Brothers, Bertrandias returns to Douglas, Goad named GM group executive, Patterson takes AA post.

In the news during the week were the appointments of an airline president, a company executive to a financial firm, a new vice president, group executive, and information man.

▸**Col. Robert M. Love** will become president of All American Aviation, Inc., next January, according to an announcement by **Halsey R. Bazley**, present president, who will return to Pittsburgh as vice president in charge of operations. Bazley accepted the presidential appointment of AAA several years ago on a temporary basis for an indefinite period.

Col. Love was president of Inter-City Aviation, Inc., which operated at the Boston Airport before joining the Air Transport Command. He was a member of the Massachusetts State Aeronautical Commission in 1941.

▸**L. C. Goad**, vice president of General Motors, has been appointed a group executive in charge of GM's division at Dayton, Ohio in charge of Aeroproducts and Inland Manufacturing, also divisions at Rochester, N. Y., Linden, N. J., Southgate, Calif., and contemplated plants at Atlanta, Ga., Framingham, Mass., Kansas City, Mo., and Wilmington, Del. It was also announced that **W. S. Roberts**, former assistant general manager of the Buick-Oldsmobile-Pontiac Assembly division, will succeed Goad as general manager of that division.

▸**Buell Patterson**, formerly publicity director for the airplane division of Curtiss Wright Corp., Buffalo, has been named assistant director of public relations for American Airlines System. He was with American before going to Curtiss-Wright.

Stuart Cameron, formerly assistant public information director for American has been named news editor for the airline.

▸**Maj. Gen. Victor E. Bertrandias**, (photo) former vice president of Douglas Aircraft Co., has been relieved of active duty and returned to Douglas in charge of export sales. He saw duty overseas mostly in the Pacific and also served as chief of maintenance for the Air Technical Service Command at Wright Field.

Gen. Bertrandias originally joined Douglas in 1932 in charge of export sales for world distribution, later heading the company's materiel division.

▸**Francis A. Callery** (photo) will become associated with the firm of Lehman Brothers, following his resignation as financial vice president of Consolidated Vultee Aircraft Corp. He will continue to serve the aviation company in an advisory capacity and will remain as a director and member of the executive committee. Callery joined Convair in 1942 after having been associated with Emanuel and Co., for ten years.

He was active in the original financing of Vultee and handled the purchase by Vultee of Consolidated. He has been in the banking and financing business for many years and is a director of several companies.

* *

Post-War Luscombe *Silvaires* Rolling Out of New Texas Plant

Production now three daily with rate increasing; follows pre-war 65-hp. craft with all-metal fuselage; larger and more powerful models reported in planning stage.

By ALEXANDER McSURELY

Post-war Luscombe *Silvaires*, 65-hp. two-place metal construction personal planes, already are rolling out the doors of the new Luscombe factory at Garland, near Dallas, Texas, at the rate of three a day, with the production rate on a steady up curve.

Not very many other lightplane makers are turning out planes this fast yet, but the Luscombe production figures are the more newsworthy because as recently as last July there wasn't any factory at the new Luscombe location.

▸ **Pre-War Model**—Essentially the Luscombes now in production are the same as the pre-war *Silvaire* 8-A. A higher-powered 85-hp. version will augment the line soon when current engine installation griefs are ironed out.

The youthful Luscombe president, Leopold H. P. Klotz, has some aces up his sleeve in the way of other models, but they are not yet ready for announcement. Eventually Luscombe may be expected to enter the four-five place family plane competition, and there is some talk about a pet design which Gene Norris, new Luscombe chief engineer, has been polishing up.

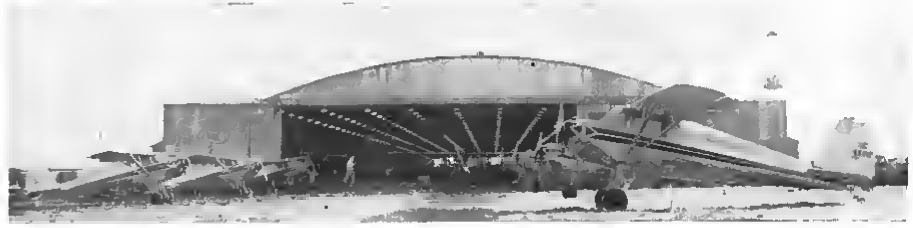
▸ **Factory** — Starting from scratch at the Garland location has given Luscombe opportunity to do an excellent factory planning job, and to stock its plant with latest type machine tools at RFC bargain prices. The all-metal (except fabric wing covering) construction of the *Silvaire* is well suited to quantity production methods. Heavier jigs and fixtures are replacing the pre-war equipment throughout the new layout. All in all, it looks as if the Luscombe plant's first year may put it well up among the leaders in quantity lightplane production.

Before the company's wartime conversion to metal subassemblies for warplanes, the Luscombe ranked fourth in the number of private planes produced. Approximately 1,200 Luscombes had been delivered between the beginning of production in 1937, and the conversion to war contracts. The Dallas location was selected over the former Trenton, N. J. plant site, because of a more central location, better flying weather, and a less crowded labor market.

▸ **Mass Output**—Klotz, a native of Germany, who received his early engineering background in British aircraft factories before coming to this country, has been a vigorous advocate of volume production methods since he first became connected with the Luscombe company. The Trenton plant was the first lightplane factory in this country to have an overhead conveyor system and a mechanically moving assembly line. While the big metal hangar-type factory building still is receiving additional tools and equipment, and the final setup has not yet been crystallized, it is planned to operate two moving assembly lines into which the subassemblies will feed.

The main factory is adjoined by two smaller buildings one of which is used for experimental engineering work. The plant site includes approximately 700 acres, a large portion of which is being developed for a flying field which already is in use for test flying the new planes.

▸ **Comfortable** — A short demonstration hop in one of the new *Silvaires* showed the side-by-side



Production Mounts at New Luscombe Plant: *Production of Silvaires is increasing steadily at the new Luscombe plant near Dallas. Photo shows final assembly end of new hangar-type plant building with finished planes lined up ready for tests. The plant is a new one, having been built since July.*

Montana Airmarking

Montana's state highway commission has agreed to assist in the state's airmarking program, sponsored by the Montana Aviation Association. Highway workers, when they are painting a dividing line on the pavement also will paint the number of the highway at intervals in numerals large enough to be read from a plane at 4,000 ft. Location and class of every certified airport in the state will be indicated on state highway maps.

At its recent conference in Helena the association, also made plans to promote aviation education by asking that teachers be trained in a special University of Montana summer course for instruction in aviation; to seek to increase the number of airports in the state from 95 to 200, to foster a state-wide airport planning conference as soon as the federal airport aid program crystallizes in law.

"Silvaire" in Flight: *Familiar lines of the pre-war Luscombe are apparent in this photo of the post-war built* Silvaire *shown in flight near the new Luscombe plant in Texas.*

plane to be comfortable and roomy beyond the average lightplane accommodation, although entrance into the cabin offers the usual difficulties encountered in a strut-braced highwing design. Cabin heater and ventilator kept the plane comfortable on a raw November day, while the interior was attractively styled. Other noteworthy points about the plane's equipment are its starter and generator, a one-piece Plexiglas windshield, and an overhead "skylight" for additional visibility; dual stick controls, shock-mounted instruments, full-swivelling steerable tailwheel, semi-cantilever fixed landing gear with oleo shock struts.

The *Silvaire* 8-A has a top speed of 115-mph, a cruising speed of 105-mph. (one of the fastest lightplanes in its power class) and a 37-mph. landing speed. Rate of climb is 900 fpm., with 15,000-ft. ceiling, and 350-mile range.

▸**Wing**—Reports that Luscombe would put a metal skin on its wing panels to make the plane completely all-metal were discounted by company officials.

Such a change would involve redesign of the wing, and slow down production at a time when dealers and distributors are loudly vocal about more plane production. The company's experience with the fabric-covered metal structure wings, with detachable metal wingtips has been good, and these will continue on the present model at least.

CAP Has Big Role In Miami Air Show

More than 500 Florida CAP Cadets and senior officers will assist visiting flyers participating in the private flyers' cross country tour to Miami, Fla., for the All-American Air Maneuvers, Jan. 4-6, Lt. Col. Zack T. Mosley, Florida CAP wing commander, has announced. Several hundred CAP members from other states also are expected to join in the tour.

The Florida cadets under supervision of senior officers will assist the 2,000-3,000 expected visitors, by parking arriving planes, staking them down and handling luggage.

▸**"Pony Express"**—The Florida wing also will cooperate with other CAP state wings in operating an aerial "pony express" which will transport approximately 20 aviation writers and other aviation people to Miami, from New York. The trip will demonstrate the activities of the various CAP wings of the states en route, and show the writers the progress of private flying at smaller airports in New York, Pennsylvania, Maryland, District of Columbia, Virginia, North Carolina, South Carolina, Georgia and Florida. The tentative schedule calls for stops at nine cities, with CAP pilots flying the passengers from one end of the state to the other, where they will be transferred to planes from the neighboring state for their next hop. Stops enroute will include Philadelphia, Baltimore, Washington, Richmond, Va., Raleigh, N.C., Florence, S.C., Savannah, Ga., Jacksonville, Lantana and Miami, Fla.

ALL-METAL HANGAR AND PLANE:

Two all-metal newcomers to personal aviation, the Stran-Steel T-Hangar and the Globe Swift, were shown at the recent National Aviation Clinic by Helen Catlin, in a demonstration at Oklahoma City's Bethany airport. The two-unit hangar, manufactured by Great Lakes Steel Corp., Stran-Steel division, utilizes the military Quonset hut building methods and materials. A corner section, at left, provides office or shop space, while the rear section of a second T-hangar is seen at extreme right. The Swift, two-place personal plane, is in production at the Globe Aircraft Corp., Ft. Worth, Tex.

AVIATION CALENDAR

Dec. 10-11—Aviation Distributors and Manufacturers Association, Hotel Statler Cleveland, Ohio.
Dec. 11-12—Western Aviation Conference Sacramento, Calif.
Dec. 13-14—Airline Finance and Accountant Conference, Dallas.
Dec. 16-17—International Aviation Day, El Paso.
Dec. 17—National Aeronautic Assn. and Aero Club of Washington banquet honoring recipient of Robert J. Collier Trophy and presenting Brewer Trophy and Haire Awards, Statler Hotel, Washington, D. C.
Dec. 17—Institute of Aeronautical Sciences Wright Brothers Lecture, Washington.

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Jan. 4-5-6—All-American Air Maneuvers Florida Air Rees
Jan. 7-11—SAE Annual Meeting, Book-Cadillac Hotel Detroit, Mich.
Jan. 11-20—Cleveland (Ohio) Aircraft Show.
Jan. 21-22—National Aviation Planning Council, Boise Hotel, Idaho.
Jan. 28—Institute of Aeronautical Sciences Honors Night Dinner, Waldorf-Astoria Hotel New York.
Jan. 29-31—Institute of Aeronautical Sciences, Annual Meeting, tentatively scheduled for Pupin Laboratory Columbia University, New York.
Feb. 12—IATA European Rate Conference, Paris.
Feb. 21—IATA Middle East Rate Conference, Cairo.
Feb. 26-28—Air Transport Association Engineering and Maintenance Conference Place not yet set.
March 1-5—Pan American Aircraft Exposition, Dallas, Texas, reviving pre-war annual exhibit.
March 8-16—Southwestern Aviation Exposition, Fort Worth, Tex.
April 2-5—SAE National Aeronautic Spring Meeting, Hotel New Yorker, New York.

Parks to Handle 1,800 *Ercoupes* Annually Under Expansion Plan

Files statements with SEC covering $1,494,455 stock issue to finance enlarged operations, citing belief in rapidly growing personal aviation market.

Mapping a large-scale personal aviation sales program, Parks Aircraft Sales & Service, Inc., East St. Louis, Ill., has filed with the SEC a registration statement covering a $1,494,455 common stock issue to make possible a distributorship agreement which calls for delivery of 1,800 *Ercoupes* annually.

"The corporation believes that there now exists a market considerably greater than the pre-war market for the personal plane and the services to be rendered in connection with its use" states the firm's prospectus on the offer of 457,020 shares of stock at $3.27 per share, "and that that market is sufficient to warrant the size of the operation contemplated." The shares will have a par value of $1.

▸**Other Plans**—While it believes it will be primarily an *Ercoupe* distributor and its success will depend on its ability to market that plane, the firm said it does not intend to handle only that aircraft.

The distributorship agreement with the Engineering & Research Corp. provides that Parks will receive a 25 percent discount on list price of new planes, a 40 percent discount on list prices of parts and an unspecified discount on accessories distributed but not made by Erco.

▸**Organization**—In event of price reductions by Erco, Parks will receive a rebate on products in inventory. Parks is obliged to maintain a sales and service organization and a financial condition satisfactory to Erco and to carry a minimum net price inventory of $125,000 of new parts besides the annual 1,800-plane purchase.

The firm says it has an organization covering Illinois, Indiana, Missouri, Kansas, Iowa, Nebraska and most of Ohio and will operate and supervise dealer operation of storage and service facilities in that area.

▸**Contracts**—In addition to its Erco agreement Parks has the following contracts with Continental Motors to operate a parts distributing service at Parks Metropolitan Airport, East St. Louis, with Bendix Radio Division for exclusive distributorship in several states and for repair and replacement parts, with Goodyear Tire & Rubber for non-exclusive distribution of tires, tubes, wheel and brake parts; exclusive distributor rights in several states for Berry Bros., Inc., products.

With Marshall Field & Co., Chicago department store, it is conducting an experiment in marketing personal planes through department stores. If this is successful, Parks says, it will be extended to other department stores in its territory.

▸**Stock Offer**—The entire stock offering will be made initially to holders of the firm's common stock on a 3-1 basis and to holders of Parks Air College stock on a 1.75-1 basis. Employees also will be given an opportunity to purchase.

The issue is the result of a merger of four subsidiaries of Parks Air College, Inc., which were organized to furnish flight training to AAF cadets. All had interlocking directorates and were controlled by Oliver H. Parks, their organizer. Other officers of the corporation are: vice-presidents, Frank C. Struif, Alden B. Woodbury, Fulton M. Moore, Douglas E. Fletcher, Jr., and Willis D. Gremp; secretary-treasrer, Richard E. Stoughton.

Accidents Blamed On Reckless Flying

Reckless flying and low altitude flight caused the majority of lightplane accidents investigated recently by the Civil Aeronautics Board.

Briefs of the mishaps and Board findings follow:

CASTLE ROCK, MINN.: Private Pilot Frank R. Baker, 23, (58 hours flying time) and his two passengers, John Weinal and Glen Peterman, all three of Randolph, were fatally injured when he piloted a Piper J5A and spun to the ground during a low flight over his father's farm Aug. 19, 1945. Baker took off from the Carleton Airport, Stanton, Minn., and headed in the direction of the Baker farm at a very low altitude, described as just above the tree tops. Shortly thereafter it smashed and burned in an open field about 400 ft. from the Baker home. Examination revealed no indication of malfunction of aircraft or engine prior to impact. The pilot's experience was limited and a gusty wind of 18 m.p.h. probably contributed to his loss of control of the heavily loaded aircraft.

CAR FINDING: Probable cause of accident was an inadvertent spin at low altitude.

DU BOIS, PENNA.: Commercial Pilot Barr D. Valentine, 37, (2,000 flying hours), St. Mary's, was injured fatally, and his passenger, Frank Walter Sekelsky, Johnsonburg, was seriously injured, when a Taylorcraft DC65 in which they were flying struck the chimney of a house, following an acrobatic maneuver at low altitude, Aug. 20, 1945. Shortly after takeoff from Du Bois Airport for a local pleasure flight, the aircraft was seen flying at low altitude in the direction of Du Bois. Ten minutes later they returned to the airport still flying low. Upon reaching a residence 600 ft. north of the north-south runway, a steep wing-over was executed and the aircraft struck the house chimney before recovery was effected. The plane, with its left stabilizer and elevator torn loose, continued in a level flight attitude for a short distance, then crashed in an open field and burned.

CAR FINDING: Probable cause of accident was reckless flying during which the pilot failed to clear an obstruction.

CAMPBELLSVILLE, KY.: Commercial Pilot Fred H. Rovner, 25, (2,600 hours) and his passenger, Marvin Boyd, were fatally injured and a Piper J3L demolished when they struck the field boundary fence and crashed during a dive at a spectator at the Campbellsville, Airport, Sept. 3, 1945. Rovner and Boyd took off from the airport carrying with them a shoe taken from a girl at the field. They came back across the airport and dropped the shoe, then circled to the right and again headed toward the field. As one of the girls ran out to pick up the shoe Rovner dived the plane in her direction. During this dive, the landing gear

BANK DISPLAYS AERONCA:

Publicizing its aircraft financing service, the Fifth-Third Union Trust Co., of Cincinnati, recently placed an Aeronca Champion on display in its lobby. The bank is financing two-thirds of the sale price on both new and used aircraft, with balance to be spread over twelve months, on loans up to $1,500. The bank is discounting contracts for operators, distributors and dealers in the same manner it has been handling automobile contracts for a number of years.

struck a wire fence at the north end of the field and the plane crashed 100 ft. inside the airport boundary.

CAB FINDING: Probable cause of accident was reckless flying during which the aircraft collided with an obstruction.

TOLEDO, OHIO: Commercial Pilot Everett Eugene Allen, 42, (491 solo hours), was injured fatally, Private Pilot Frank Roemer, 26 (200 solo hours), seriously injured, and a Piper J4A destroyed when they stalled and crashed after circling in and out of low clouds, Mar 29, 1945. Allen and Roemer, without securing weather information, took off from Tiffin Airport, for a return trip to Toledo National Airport. Weather: visibility two miles, ceiling 1,400 ft. The plane was next observed four and a half miles southeast of Toledo, circling in and out of low clouds. At about housetop level a climb was started and the plane became partially obscured in clouds 100 ft. above the ground. At this point the engine ceased and the plane crashed to the ground striking on the nose and left wing tip. Examination revealed no indication of aircraft or engine failure prior to impact.

CAB FINDING: Probable cause of accident was loss of control of the aircraft at an altitude too low to permit recovery. A contributing factor was the pilot's attempt to fly contact in weather considerably below instrument minimums.

PHOENIX, ARIZ.: Student Pilot Richard Hamilton Pulis, Phoenix (eleven hours flying time, slightly less than two of which were solo), was fatally injured and a Luscombe 8A extensively damaged when he stalled the airplane and crashed while "buzzing" the house of a girl friend, July 7, 1945. Assigned to practice various maneuvers in an area south of Sky Harbor Airport, Pulis instead flew to a point 8½ miles northwest of the airport where he circled low and began zooming a house. He threw out bits of paper and opened and closed the throttle, apparently to attract attention. Following the last dive, which was to within 50 ft. of the ground, the plane was pulled up sharply and stalled. It crashed about 75 ft. west of the girl's residence.

CAB FINDING: Probable cause of the accident was reckless flying which terminated in a stall at an altitude too low for recovery. Contributing factor was the limited experience of the student pilot.

DETROIT, MICH.: Instructor Robert Lewis Hamlin, 47, (commercial pilot with 2,400 hours flying time), and Private Pilot Frank Alan Newberry, 24, (284 hours), both of Detroit, were seriously injured during an emergency landing following engine stoppage, Apr. 1, 1945. Hamlin and Newberry took off from Detroit City Airport in a Ryan ST-3KR on a local instruction flight. On return to the field, while on the downwind leg at an altitude of about 400 ft. the engine sputtered and a steep descending turn was made. During the descent the wings were rocked steeply from side to side apparently to signify an emergency landing. The plane lost altitude rapidly and while banked to the right, apparently to avoid an obstruction to the left the right wing struck a 20-ft. gravel pit at the south boundary of the field. The plane cartwheeled, skidded over railroad tracks and stopped on a pile of scrap metal. Evidence indicated that Hamlin had ignored a placard to "Take off and land on reserve," thus failing to take advantage of a three-gallon sump reserve which does not flow to the carburetor when the fuel valve is turned to the main tank.

CAB FINDING: Probable cause of accident was engine stoppage due to the pilot's failure to switch to reserve fuel.

Highway-Aviation Merger Advocated in Kentucky

Efforts to obtain for aviation purposes part of the revenue derived by Kentucky from a state gasoline and vehicle usage tax authorized for state highway purposes may lead to consolidation of the Kentucky Aeronautics Commission with the State Highway Department. Such a move is being advocated with the contention that the consolidation of aviation and highway interests would be helpful in obtaining roadside landing strips

Briefing *For Private Flying*

While United States government agencies and Congress are toying around with the idea of government funds to encourage civilian flight training, Australian Prime Minister Joseph B. Chifley has announced a vigorous government subsidy program for flying clubs. The Australian government will pay £25 ($81.25) for every completed period of 50 hrs. flown by club aircraft and will pay a maintenance subsidy for aircraft with a flying maximum of 200 hrs. per year. Each student obtaining a license will receive a bonus of £50 ($162.50). Hangars will be made available by the Australian Civil Aviation Department which also will increase subsidies to flying clubs which ask and can justify additional amounts. The decision to give financial aid to the flying clubs will be subject to review at the end of the year.

HOCKADAY "COMET"—Hockaday Aircraft Corp., Burbank, Calif., manufacturers of the "Comet", (AVIATION NEWS, July 3, 1944) two-place side-by-side $3,000 entry in the personal plane competition, is steamed up about the plane's ball-bearing mounted dual wheel controls. The company points out that the mounting does away with control column "binding" so that the wheel moves straight back or straight forward without any irregularity or extra play. The company has based its $3,000 figure on a production of 10 planes a week, plans to begin commercial production early next year. For a fixed landing gear plane the "Comet" has unusual spread between 50-mph. landing speed and 130-mph. cruising speed, with 140-mph. top speed. It will be available with Franklin 130-hp. engine, or Continental C125 hp. or "others", complete with starter and generator. Its high performance is credited to design with emphasis on weight-saving without sacrifice of strength.

GRUMMAN *MALLARD*—Grumman Aircraft Engineering Corp. expects its luxurious new sky yacht, the $80,000 *Mallard*, successor to the pre-war *Grey Goose* amphibian, will be test flown by Christmas. The twin-engine plane, largest ever built by Grumman for civilian use, has a 67-ft. span, and 48-ft. fuselage. It is designed to cruise at 180-mph. fully loaded, at 8,000 ft. It will carry eight passengers and two-man crew for 570 miles, or by dropping four passengers, can extend its range to 1,100 miles. Its accommodations include two luxuriously furnished compartments each accommodating four passengers. The plane is designed for business executives who may wish to visit field operations of their companies in remote areas, or for possible long-range air trips in this country.

40 INDIVIDUAL HANGARS—Plans for improvement of the former Curtiss-Parks Airpark, near East St. Louis, Ill., which recently has been renamed "Parks Metropolitan Airport," call for installation early next year of 40 all-steel individual hangars, with electrically-operated sliding doors, for rent at nominal cost to private flyers. The field already has four large hangars and three 1,600-ft. concrete runways. A restaurant recently has been opened at the field to accommodate increasing traffic. The field was built in 1929 and has been operated by Oliver L. Parks, president, Parks Aircraft Sales & Service, Inc., since 1940.

NATIONAL FLYING FARMERS—Approval of plans to form a national organization of Flying Farmers, around the nucleus of the Oklahoma Flying Farmers, was given by NAA officials at the recent National Aviation Clinic at Oklahoma City. Membership will be limited to pilots who derive at least 51 percent of their income from agriculture. Wives or husbands of pilot members also may be members, but children must be pilots to qualify for membership. Forrest Watson, Thomas, Okla., president of the Oklahoma Flying Farmers, reports farmers and ranchers in Texas, Kansas and Oklahoma already have indicated their interest in affiliating with the national group. While details of the organization still are being worked out it is understood that it will be a part of the overall NAA structure, but will maintain its separate entity and have complete control of its own affairs. A state will be permitted to set up an organization when it has as many as 25 pilot members. Headquarters of the national group will be at Stillwater, Okla.

—Alexander McSurely

Nashville, Tenn., Airpark Busy As Development Plan Is Pushed

Cornelia Fort field, 3½ miles from business district, has 35 planes based there; hangars nearly finished; three flight operators providing service.

Cornelia Fort Airpark, three and one-half miles from the Nashville, Tenn., business district, already is a busy center for private flyers in that area, although elaborate facilities which have been planned for it still are far from complete.

The airpark, in use since last July, has 35 planes based there. For operational purposes it can accommodate 100 planes, and it has a stake-out capacity of 500 planes. Three flight operators are maintaining service with nine flight instructors including two women. It has two 3,500-ft. turf runways.

▸ **Seaplane Facilities**—Two 80 by 60-ft. white cinderblock hangars with soil-cement flooring are nearly finished and a seaplane hangar on the Cumberland River is nearing completion. A small temporary administration building has showrooms which will accommodate four aircraft. Hourly weather reports are being broadcast through an arrangement with Berry Field, the Nashville municipal airport, making the airpark one of the few in the country with such service.

Operated by Thomas Associates, headed by Norman Thomas, former Navy flyer and private pilot, the airpark has been developed as a private enterprise after Nashville municipal authorities hesitated to finance it as a public project.

▸ **Concessions**—It is the plan of the operators to lease all concessions for flying, maintenance, repair and recreational facilities on a long-term graduated gross percentage basis, instead of charging a flat rental. The system was chosen not only to encourage returning servicemen to set up enterprises with limited capital, but also to cushion hazards in the expansion and rapid change frequently found in the aviation business. The operators are expecting their principal return from their gasoline sales profits and from their distributorship for Beech and Piper planes.

A Nashville company has contracted to assemble 500 personal planes, manufactured by an Eastern firm, at the airpark.

▸ **Attractions**—Facilities which are being developed at the airpark include a clubhouse with restaurant, spectator seats, riding academy, tennis and badminton courts, golf putting greens, boathouse on the river, and large automobile parking areas. Total cost of the airpark is estimated at $150,000.

The operators expect it eventually will become part of a recreational flying circuit connecting Nashville with many of the other vacation centers in the Southeastern United States.

FIRST AUTO AND FIRST PLANE:

The Voekel family, Vermilion County, Ind., farmers, are pioneers in new transportation. Mr. and Mrs. William Voekel owned the first automobile in the county, a 1902 Holsman. Now their son, Ellis, has the first home-based plane in the county, a Piper Cub, at his own airport on their farm where more than 50 Vermilion county farmers and members of their families are learning to fly. There are six other planes based there and Ellis already has taken orders for 18 new Aeroncas for delivery "as soon as possible" to farmers in his neighborhood. Picture shows: the elder Voekels at left with their early car, and Mr. and Mrs. Ellis Voekel with their plane.

Penna. Airport Action

The Pennsylvania Aeronautics Commission has approved cash grants for work at two municipal fields and sanctioned sites for five privately owned commercial fields and four seaplane bases.

The construction projects are at Towanda and Waynesburg. The private fields are those of J. H. Welsh at Phoenixville, Joseph Glostei at Fairhill, J. F. Myers at Mansfield, Central Penn Aero Sales, Inc., near Lebanon, and Edward Voegel at Titusville. The seaplane bases are those of W. H. Nicolai, Jr., south of the Delaware River Bridge at Philadelphia, R. J. and D. J. Stewart at Leetsdale, R. D. McAllister & Sons at Erie Harbor, and G. C. Black's private base at Tyrone.

Colorado Cities Offered Aid On Airport Sites

Free aid in choosing and planning airport sites will be provided Colorado municipalities by the engineering experiment station of the University of Colorado as a project approved under a legislative grant of $100,000 for research designed to help the state with its post-war problems.

The service includes a study and report on soil conditions in connection with construction, repair, or modification of any proposed airport site. It does not include engineering involved in later construction.

* *

Aeronautical Board May Become Key Aviation Production Agency

Reorganization and broadening of its functions puts it in position to simplify many industry problems and unify Army and Navy insofar as procurement is concerned

With the aircraft industry hopefully watching developments, the Aeronautical Board is seen as becoming the most important Government agency concerned with manufacturing through its broad authority over almost all phases of military and naval aviation research, production and procurement.

Long the principal source of the industry's Government coordination, the Board has been revitalized and restaffed since the end of the war and the abolition of APB, ARCO and ASU (AVIATION NEWS, Aug. 27). A reorganization and broadening of functions puts it in a position to simplify many industry problems in standardization, inspection, engineering, and plant "cognizance."

▸ **Unification**—Further, it is pointed out, should no results be forthcoming from the present efforts to obtain some form of unified armed service, the Board could effect many of the desired goals of unification, so far as military aircraft are concerned, through the joint efforts of its Army and Navy members.

As the Board issues specifications for both Army and Navy aircraft, it is quite possible for it eventually to have an influence on the design of civil aircraft, through the adaptation to commercial uses of military developments.

▸ **History**—Established in 1939 by Presidential order, and put directly under his authority, the Board's purpose was defined as securing "a more complete measure of cooperation and coordination in the development of aviation of the Army and the Navy, and to provide an agency for consideration of aeronautical matters." To accomplish that, the Secretaries of War and Navy have placed on the Board top-ranking airmen, headed by the commanding general of the AAF and the deputy chief of naval operations (air). Power of the Board is indicated by this paragraph in its organizational outline.

▸ "Decisions of the Board requiring action by the Army Air Forces or the Bureau of Aeronautics of the Navy Department, shall be forwarded in the form of Aeronautical Board Directives to the appropriate agencies for execution . . ."

As presently constituted, the Board will function through eight committees: Plans and Policies; Production Program, Army-Navy-Civil Committee on Aircraft Design Criteria; Research and Development; National Advisory Committee for Aeronautics; Supply and Maintenance; Aircraft Radio and Electronics, and Working. NACA acts as the Board's research agency until the termination of the war mobilization plan of 1939.

▸ **Importance**—Three of these committees are of outstanding importance, in the view of qualified industry observers. The Working Committee probably takes top-rank, as it is the steering group, controlling the direction of the Board's efforts. Its permanent members, an AAF colonel, and a naval aviator with the rank of captain, also constitute the Board's secretariat.

But of perhaps more importance to the industry will be the Research and Development Committee, the reported members of which will be Brig. Gen. Laurence C. Craigie, now deputy chief of engineering and procurement of the Air Technical Service Command at Wright Field, and Capt. Robert S. Hatcher, now deputy director of engineering of the Bureau of Aeronautics. Its functions will be:

▸ Conducting joint meetings for open discussion and exchange of information on research, development and testing being done by AAF or BuAer; reporting on such activity of AAF and BuAer, acting as liaison between the services and industry and other interested Government agencies; and recommending to the full Board action deemed necessary, among

BRITAIN'S 'B-32':
Bearing roughly the same relation to the Lincoln *super-bomber that the* B-32 *does to the* B-29, *this* Vickers-Armstrong Windsor B Mk. 1 *was a late-war development in Great Britain. Powered by four* Rolls-Royce Merlin 85 *engines, it is chiefly distinguished by its four-wheel undercarriage. The distance between the outer wheels is 50 ft. Covering of the* Windsor *is another innovation, the fabric being interwoven with steel wire and certain surfaces backed with glass cloth.*

other things, to "prevent unnecessary duplication of (research, development and testing) programs."

▸**Promise**—The latter phase of the committee's duties is the one that interests the industry in particular. Carried to the fullest extent, it would largely do away with conflicting instructions and programs given to the same manufacturer by the Army and Navy. In addition, it would assure fullest development of any project, rather than piecemeal activity by one or both of the services, or intensive effort by one and neglect by the other.

If the committee develops the full potentials of its functions, it is viewed as likely that there may be an eventual elimination of duplicate Army and Navy testing facilities.—W. K.

Continental Readying Three New 'Sixes'

Continental Motors Corp., Muskegon, Mich., last week announced details on its new A-100 and C-115-125 six-cylinder engines which now are in production. Within a few weeks three additional six-cylinder models, the E-165, E-185 and E-210 also will go into production. (Figures in each model number designate horsepower.)

Bulk of Continental's orders, which make the company the greatest single manufacturer of personal plane powerplants, are for the A-65, C-75 and C-85 four-cylinder engines. (See AVIATION NEWS, Nov. 19.)

▸**Standard Types**—All of the engines in production are horizontally opposed, air-cooled, direct drive, normally aspirated engines. By a simplification of engineering design the company has achieved a high degree of interchangeability of parts between all the four and six-cylinder engines which is expected to pay off in greater volume production, and which makes possible extensive use of special purpose tooling. Main differences in models are in bore and stroke, rated speed and accessory equipment.

British Jet Progress Outlined at Show

Latest British development of turbo-jet power plants has been indicated to some extent by a recent exhibit at Farnborough where six units were shown, of which two were revealed for first time.

On display were the better known British jets: Rolls-Royce *Nene*, the 5,000-lb. thrust of which makes it the most powerful yet announced to be in production; the Whittle W2/700/B, which is based on the original jet engine; Rolls-Royce *Derwent*, which powers the *Meteor*, and the de Havilland *Goblin II* (all discussed in AVIATION NEWS, Nov. 19). The two new units unveiled were the Armstrong-Siddeley A.S.X., and the Metropolitan-Vickers F2/4.

▸**Details**—According to *Aeroplane*, the A.S.X. is a multi-stage axial flow compressor type with 11 combustion chambers. The takeoff thrust is 2,600 lb. at 8,000 rpm. and the weight is 1,900 lb. The F2/4 is the second most powerful jet engine developed in Britain. Also an axial flow type, it generates thrust of 3,500 lb. One of its great advantages is its small diameter—it can be mounted in a nacelle 42 in. in diameter. Length is 13 ft. 3 in., and it weighs 1,700 lb.

Aircraft Job Slash Stresses War Role

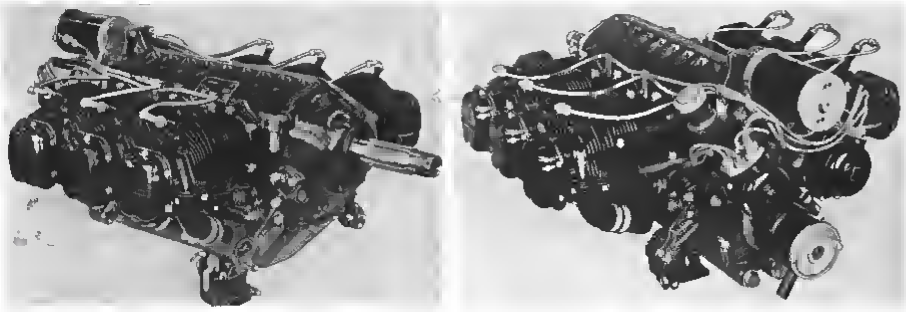
Figures released recently by the U. S. Department of Labor, showing that nearly 1,000,000 aircraft workers lost their jobs within two months after the Japs surrendered, indicate the great contribution made by the aeronautical industry.

By the end of September, cancellation of aircraft contracts had reduced employment in the production of aircraft, parts and subassemblies to about a quarter of its pre-V-J Day level (338,000). Most of the decline occurred immediately after termination of hostilities in August, when over 700,000 workers, nearly two-thirds of July's employment, were let go.

▸**Further Cut**—The further drop of 182,000 in September returned the industry to the employment level existing six months before Pearl Harbor. If September is measured in terms of peak employment, attained in November, 1943, the industry's labor force had shrunk by over 1,750,000—84%.

The figures, released by the Bureau of Labor Statistics, are based on the Aeronautical Monthly Progress reports, tabulated and analyzed for the AAF, and include estimates for all establishments—subcontracts and parts suppliers—even though not normally classified as aircraft plants. Airframe plants, representing the largest segment of the aircraft industry, employed almost half the workers.

▸Except for one month—January, 1945,—airframe employment declined steadily after November, 1943. Nevertheless, schedules were maintained because of increasing productivity and changed requirements as the war progressed.



New Continental Engines: *Continental Motors' new C-115-125 six-cylinder light plane engine (left, front view) now is in production together with the A-100 six-cylinder engine (right, rear view). The C-115 is rated at 115 hp. at 2,350 rpm. and at 125 hp. at 2,550 rpm.*

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Dr. Durand Outlines Jet Motor's Future

Development now compares with internal combustion engine of 40 years ago, he says.

In its present state the jet propulsion engine may properly be compared with the internal combustion engine of 40 years ago—the very beginning of the aeronautical area—says Dr. William F Durand, former chairman of the division of engineering and industrial research, National Research Council

Dr Durand, speaking before the American Society of Mechanical Engineers, held that the future growth and improvement of the jet propulsion engine "has before it a brilliant and impressive future." He added it undoubtedly will occupy "a highly important place in the field of aircraft propulsion, perhaps of exclusive use for the higher ranges of the airplane speeds a quarter of a century hence."

▸ **Work Needed**—To bring realization of this improvement, Dr Durand said, work is needed on the problems of fuel combustion, the metallurgy of turbine blades for use at ever-increasing temperatures, on design of the engines themselves, and on plane design and construction to stand the speeds produced by jet propulsion

Noting the jet propulsion engine itself is free from loss of efficiency at speeds equal to or above the speed of sound, about 1140 feet a second, Dr. Durand, pointed out that such speeds create problems with respect to the airplane which need constant study.

▸ **New Problems** — "The aerodynamics of low and present commercial speeds is well understood and has been the subject of thorough-going research in all the leading countries of the world," he said. "Only more recently has the importance of aerodynamics of sonic and supersonic speeds forced itself on the attention of designers and aeronautics engineers."

Because the efficiency of the jet propulsion power plant increases with the temperature of the gas in the turbine, problems have arisen with respect to finding materials resistant to ultra-high temperatures In 1941, he said, when special attention became directed to the matter of high temperature resisting metals, 1,200 to 1,300 degrees F, was about the limit which could be attempted with the best materials metallurgical science could provide During the war, active research was carried on with the result that the upper limit was raised by some 400 to 500 degrees

▸ **Future Research** — Dr Durand said this should be considered only as a way station He suggested at least two directions in which search may be made for disposition permitting the use of higher gas temperatures These are the use of ceramic-coated blades and the cooling of the blades Ceramic materials in themselves, he said, are lacking in the physical properties of strength for use as the sole material of the blade of a gas turbine But the combination of a ceramic coating to take the impact of the hot gas backed by a metal for the needed strength appears to offer definite hope

'Flying Laboratories' Test Jet Engines

General Electric's I-40 jet engine currently is undergoing rigid flight tests in the company's flying laboratories — converted *Liberators*

This power plant, which is in Lockheed's P-80 *Shooting Star*, has been installed in the fuselage of a B-24 for the future development and testing of the jet engine under actual flying conditions.

▸ **Advantages** — N F Fischbertz, one of the GE engineers assigned to the project together with W R. Orme and W O Meckley concluded that the "flying test cell" provides a greater number of advantages and facilities of a ground test cell or wind tunnel, with considerable less cost and greater availability.

They point out that the use of the B-24 as a flying laboratory proved to be more satisfactory and cheaper than building a wind tunnel for the testing of the jet engine which passes over 55,000 cubic feet of air per minute—ten times the flow required by reciprocating engine of the same size

▸ **Safe Tests**—Use of the B-24 allows flight space for design engineers to observer operations under flight condition and also serves to supplement present ground and flight test facilities It also provides a safe means of investigating restarting problems, burner blowout, new accessories and induction system icing which may involve dead stick landings on production type jet aircraft

Knowledge of the operation and installation of the jet engine was gained by experimenting with jet powered fighters such as the P-80, but they are not adequate for development testing as the weight and bulk of the required instrumentation cannot be carried in a fighter

NWA Extension Boosts Income Net

The effect of Northwest Airlines' extension into New York, whereby financial report for the fiscal year it became the fourth transcontinental air carrier, is evident in its ended last June 30.

Net profit for the year was $727,714 after taxes and reserves, a 41 percent increase over the previous fiscal year Earnings amounted to $1.35 for each of 539,070 shares of common capital stock outstanding at year's end Surplus last June 30 was $2,024,210.

▸ **Service Record**—Service provided by NWA during the last fiscal year is described by President Croil Hunter as more extensive than for any similar period in its 19-yr. history Further increases are promised for next year, when four-engine equipment is available.

Other increases in the past fiscal year, compared with the year before:

Operating revenues up 57 percent Passenger revenue, up 58 percent to an all-time high of $7 972 423. Air mail revenue, up 14 percent to $1,818,886 Revenue miles, up more than 4 million to 9,634,390 Revenue passengers, up more than 100 percent to 247,589 Revenue passenger miles, nearly doubled to 162,325,068 Mail and express pound miles were up 600 million each to reach 5 289,489,351 and 1,628,994,471, respectively

▸ Express and miscellaneous operating revenues for the year were $119,472. Revenue load factor was 85.80 and performance factor 96.20 percent

Clark-Babbitt Associates Opening Venezuelan Firm

Don McNeil, president and chief engineer of Clark-Babbitt Engineering Associates, Inc., industrial and aeronautical engineering consultants, recently left for Caracas, Venezuela, to form a wholly owned subsidiary, Venezuelan-American Engineering Corp.

The new company is to act as consulting and contracting architects and engineers Facilities of the firm will be available to the Venzuelan government as well as to Venzuelan private industry and American interests in South America

Problem of Pilot Fatigue Stressed

NYU professor tells ASME scientists must cooperate in redesigning to "adapt machine to man"

The physiological effects on humans of flight, studied intensely during the war by flying forces of all nations, is a problem calling for the "adapting of the machine to the man," in the opinion of Frederick K. Teichmann, professor of aeronautical engineering at New York University

Terming this the application of biomechanics to airplane design, he told the American Society of Mechanical Engineers that the whole problem is one that must be solved not only by engineers, but also by doctors, psychologists and physiologists

▸ **Cockpits**—Teichmann was particularly critical of present cockpit design, declaring it has been built up as a result of a series of compromises

Among reactions that should be considered are the sense of feel and touch, sight (type of illumination, and numerals on dials), smell (ventilation), and also the sense of hearing

He recommended increased study of fatigue, and the effect of noise, vibration, heat and other factors on man's ability to resist fatigue.

▸ **Nazi Discoveries** — Fatigue and vibration have long been under intensive study, especially by the flying forces An interesting report of German discoveries of one effect of flight in jet-propelled aircraft has been released by the Combined Intelligence Objective Subcommittee Many of the pilots that flew jet aircraft for as little as ten minutes appeared unduly fatigued upon landing and some even had no recollection of landing

The presumed cause was that the high frequency vibrations generated by the jet unit produced a noxious effect on the pilot. This belief was lent some support by observation of workers testing the jet engines of V 1's before assembly

Some individuals experienced headaches, nausea and erratic gait after very brief exposure to the noise and vibrations of the engines

German scientists were working on counter-measures at the end of the war.

PERSONNEL

★ ★

Several New Appointments Are Announced By TWA

Transcontinental and Western Air, Inc., announces several new appointments. W. Kemper Jacks (left) has been appointed supervisor of operations for the Intercontinental Division, succeeding Frank E. Busch (center) who has assumed new

duties as manager of the division. Dr. John Baldwin, Jr. (right) has been appointed medical director of the Intercontinental Division. Capt. Walter A. Hamilton has been released from active duty in the Navy and has been named special assistant to the executive vice-president of TWA. T. E. Oakes becomes senior staff assistant in charge of contract sales for the airline.

Admiral King's Ex-Pilot Named PCA Legal Aid

PCA announces appointment of **Lt. Stuart T. McAlister** as legal assistant to the vice-president, and promotion of **Harold A. Olsen** to general traffic manager. Lt. McAlister was pilot of Admiral King's plane during the war and prior to that practiced law. Olsen was formerly western divisional traffic manager and served as Detroit district traffic manager and assistant to the vice-president.

Col. Richards To Direct TACA In Latin America

Col. Silas R. Richards (photo) has been elected vice-president in charge of operations for TACA Airways of Central and South America. Col. Richards was awarded the Legion of Merit for his part in directing the airborne invasion of France. He will have general supervision of all international flights. Before joining the AAF he was a pilot with United Air Lines. Shelby W. Merrill has been named passenger sales manager for TACA with headquarters in Tegucigalpa, Honduras. He was formerly with TWA and American Airlines.

Lt. Comdr. Edward J. Greer has joined the flight department of the Air Transport division, Matson Navigation Co., with headquarters in San Francisco. He has been a pilot and also served with CAA as an air carrier inspector.

A. R. Butler, formerly district airport engineer with the CAA, has been appointed project engineer for the General Airport Co., Inc., of Stamford, Conn., designers and architectural engineers of airports. **Lt. Frederick Franklin** has been named staff engineer of the company. He has been in the AAF for the past five years.

James W. Eben (photo) has been appointed director of advertising and public relations for United Aircraft Products, Inc. Eben has just been released by the Marine Corps. Prior to entering the service he was a sports columnist, auto editor and a member of the city and radio staffs of the *Newark Evening News*, N. J.

Dr. Carl F. Frische, chief research director of the Sperry Gyroscope Co., has been elected vice-president in charge of engineering. **Harry F. Vickers**, president of Vickers, Inc., and a vice-president of Sperry, has been elected a director to fill the vacancy on the board created by the resignation of **Brig. Gen. Frank T. Hines**, who recently was appointed ambassador to Panama.

Lt. Comdr. Barney Capehart has been named chief of the aviation division, Bureau of Public Relations, Navy Department, replacing **Lt. Comdr. Robert Neff** who has been released from duty and has rejoined Pen American Airways. Comdr. Capehart formerly was aviation specialist for *Collier's* magazine, promotional manager for *Flying* magazine and for eleven years served on the staff of the National Air Races. He was on the contest board of National Aeronautic Association for ten years.

Ghidden Forbes (photo), formerly with the Ninth Air Force Service Command, has joined American Overseas Airlines, division of the American Airlines System. Forbes will be assigned temporarily to the company's London office as passenger traffic officer before reporting to AOA's Copenhagen office in the same capacity.

Paul M. Strieffler (photo), formerly assistant to the vice-president of Pen American Airways in charge of operations, has been named administrative assistant to the Atlantic division manager, **Robert L. Cummings**, at the La Guardia headquarters. Strieffler has served two years in the Navy, and prior to entering service was a partner of a New York investment banking house.

Col. James H. Howard, Congressional Medal of Honor winner, has been appointed chief of aeronautics for St. Louis. He will head the aviation section of the department of the president of the Board of Public Service. He replaces **Thomas E. Flaherty**, former regional supervisor for the CAA, who resigned a year ago. Col. Howard flew with the Flying Tigers.

William C. Gage (right) has been named aviation sales menager for Allison division, General Motors Corp. He was previously field service menager and now will direct sales of Allison liquid-cooled engines. **Guildford C. Pearce** (left) will be Washington representative reporting to Gage. Pearce has been manager of Allison's zone office in the Mediterranean theater of operations.

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Non-Scheduled Cargo Companies Seen Attracting Venture Capital

Air Cargo Transport, Inc., successfully completes first public sale of securities by this type of carrier; shares went for $3.50, now have bid price of $4.50.

The first public sale of the securities of a non-scheduled cargo carrier has been successfully completed. On November 2, 300,000 shares of the common stock of Air Cargo Transport Corp were publicly offered at $3 per share. Recently, these shares commanded a bid price of $4.50 per share.

The circumstances surrounding this sale may be indicative of additional financing to come in this field. At the present time venture capital, attracted by the growing aspects of aviation, is eager to get a foothold in some branch of the industry. The non-scheduled field now is experiencing a mushroom growth and while it contains numerous speculative pitfalls, nevertheless continues to be intriguing.

▸ **Company**—Air Cargo Transport Corp. is one of the larger non-scheduled air cargo services and is headquartered in New York City. Active operations have been in progress since July with a Lockheed *Lodestar*. Six Douglas C-47's were purchased from the Reconstruction Finance Corp. at $20,000 per plane and are expected to be in operation soon.

The company is passing through an experimental period. In the words of the prospectus "The air cargo field is just beginning and it is the intention of the management to keep abreast of developments in this field."

▸ **Stock Attractive** — Despite the admonition on the prospectus (required by SEC regulations) "These Securities are Offered as a Speculation"—there were many takers for the stock and it soon attained a premium. Sold to the public at $3 per share, the company received $2.50 and 50 cents going as an underwriting commission.

The underwriters, Bond & Goodwin, Inc., made no firm commitment, but merely agreed to use their "best efforts" to market the stock. This is general practice when the underwriter does not wish to be saddled with an issue that may not sell very readily.

▸ **Stock Warrants**—An interesting element, peculiar to ventures of this type, also is present in the form of warrants entitling the holders to purchase a total of 120,000 shares of new stock at $3 per share for a five-year period starting 160 days after the effective date of the registration statement. These warrants, sold at the nominal price of one cent per warrant share, were issued to the extent of 90,000 to the underwriters and 30,000 to the "founders" of the company.

The obvious purpose of these warrants is to provide the underwriters with additional motivation —and compensation — to market the stock successfully. The "founders" or management are given an added incentive to place the company on a going, profitable basis. Initial executive salaries are nominal. If the corporation is successful, the theory is that the price of the common stock will appreciate, thus benefitting the management warrant holders.

▸ **History**—As with all new enterprises, considerable risks are inherent in operation at the outset. But to this, the natural rejoinder can be that the initial beginnings of American Airlines, Eastern, TWA and other now firmly entrenched air carriers were fraught with peril.

Informed observers believe that one of the major factors which will make or break the non-scheduled cargo operator is the question of regulation.

▸ **Hopeful** — Many non-scheduled operators are eager to provide service now in the hope that this will endow them with some "grandfather" rights when the field is more actively organized and regulated. After all, this was the pattern followed in the motor carrier industry and the basis for most of scheduled air routes flown today by the established air transport lines.

On the other hand, regulation also can move in the opposite direction and cause a blackout of non-scheduled air services. In order to be profitable, these services must develop substantial volume at low rates. If successful, such operations may cut in heavily upon the scope of service envisioned by the scheduled certificated airlines. With this event, the established air carriers may petition the Civil Aeronautics Board to order the non-scheduled operators to show cause why they operate without proper certification. The Board, of course, is now investigating non-scheduled services on an action of its own (Docket 1501), and its ultimate findings may decide the fate of these new operators.

▸ In the meantime, as the capital requirements for a non-scheduled air operation are relatively small, it is to be expected that many such new services will be inaugurated. In time, there may be more public financing of these new ventures. The experience of Air Cargo Transport Corp. in the capital markets will be most encouraging to others.

UAL Net Income Drops Although Revenue Rises

A decrease in net income, despite increased operating revenues, is reported by United Air Lines for the first nine months of 1945 in its third quarter report. The same is true of the quarter.

Net income for the first three quarters this year was $4,113,116. Last year it was $5,194,509. Third quarter net was $1,506,155 this year, against $2,269,672 last. Operating revenue first nine months this year, $29,322,087, same period last year, $25,806,592; third quarter this year, $10,892,510, same period last year, $9,993,124.

▸ **Mileage Increase**—In the face of passenger fare reductions, passenger revenue was almost 20 percent higher for the third quarter of 1945 than the same three months a year ago, due to a 34 per cent gain in revenue passenger miles. Mail revenue, on the other hand, showed the effect of the drop from 60 cents to 45 cents per ton-mile paid United by the Post Office Department, and was down approximately 15 percent in the third quarter comparison.

California-Alaska Service Mapped

Bird Airways of Long Beach, planning diversified program, will use two surplus *Catalinas*.

Bird Airways of Long Beach, Calif., an aggressive newcomer in the post-war picture, will attempt to make diversification and imagination pay off in the hazardous field of non-scheduled flying.

The president and sole owner, Forrest M. Bird, reports he is already breaking even through charter flights, ambulance trips, and flying hunting parties into the Dakotas and Washington.

▸ **Alaska Run**—By Feb. 1 he hopes to have operating the first regular Long Beach-Alaska freight and non-scheduled passenger service, using two surplus *Catalina* amphibians.

At that time Bird Airways will have in flight, or in final overhaul and modification, a fleet of two Cessna T-50's, a Noorduyn *Norseman*, a North American *Texan*, a Waco trainer, two *Cubs*, two converted C-47's and the *Catalinas*.

▸ **Contracts**—"We already have contracts for transportation of perishables and passengers, and expect to make a weekly round-trip between Long Beach, Anchorage and Fairbanks," Bird said. "The *Catalinas* should do the round trip, including pickup stops, in 80 hrs., flying the coast route in good weather and the inland route to Fairbanks at other times. We will bring down high value seafood shipments, and eventually will buy furs for ultimate shipment to Eastern brokers."

Since the end of the war Bird has done a land office business in charter hunting trips, charging 25 cents a mile for his Cessnas. Currently he is profiting from the ODT's order for East-bound military transport by airline.

▸ **Staff**—The company employs 10 pilots, recently discharged from the armed services and all holding 4000-hour logs. Bird pays them $400 a month base pay plus $3 an hour flying time and expenses.

As an incentive for insuring return-trip loads, Bird Airways pilots receive, on transcontinental flights, 10 percent of business they develop at the turn-around point above the basic charter fee, which is $1295 to New York.

While Bird's pilot pay may appear to be somewhat high for a small, developing company he insists that he is slightly ahead of the red-ink bottle and certain that an early record of contract performance and safety will assure good returns from future business.

Result of ODT Order

The ODT order requisitioning 70 percent of the airline seating space eastward from coast cities to handle homeward bound GI's brought an immediate increase in demand for chartered aircraft.

The requests were from civilians unable to get aboard airliners as well as from servicemen who were unwilling to wait their turn in the jam which is increasing as each day brings more ships and air transports from the Pacific. Effect was most in evidence in the West, but there was an immediate spurt in demand noticeable in the Midwest and East, mainly from civilians.

▸ **Planning**—An example of the operator's planning is his preparation of flying ice-box for high-value perishables, and his negotiations with Southern California morticians for the transport of bodies which otherwise would be shipped by rail and with attendant inconvenience to relatives.

The firm's trainers are being kept busy in giving flight checks to pilots renewing commercial licenses and in primary instruction. Bird makes a feature of offering free ground school instruction.

Also on the company's list of charter income sources is the contracting of airplane fish spotting service for fishing fleets based on the California coast. —S. B.

Waterman to Carry Passengers Jan. 1

Waterman Airlines, Inc., which started daily cargo operations in Alabama Nov. 15, expects to begin carrying passengers about January 1.

The company, a subsidiary of Waterman Steamship Corp. (AVIATION NEWS, Nov. 5), was granted a certificate by the State Public Service Commission to serve 10 major communities as soon as the entire fleet of Lockheed *Lodestars* is received from the reconversion line at Lockheed.

▸ **Schedule**—Initial cargo schedules, which have been mainly for shakedown and route familiarization purposes, have called for a

AIRBORNE MOVING VAN: *A National Skyway Freight Corp. Budd Connestoga is loaded from a furniture moving van in an operation typical of those being carried on by the non-scheduled cargo line organized by former members of Gen. Chennault's "Flying Tigers." The line operates a fleet of Connestogas purchased from the RFC.*

round-trip daily from Mobile to Dothan, Montgomery, Birmingham, Huntsville and Muscle Shoals.

Maintenance shops and operations base are at Bates Field, Mobile, where a staff of certificated mechanics will maintain equipment.

Tariffs have been filed with the commission. As cargo shippers, the company looks particularly to the seafood, poultry, produce and flower growing industries as well as general traffic, C. B. Waterman, vice president, said. Flights so far have carried radio parts, rice samples, hardware, turkeys for a Mobile hotel, phonograph records and other cargo, as well as frozen seafoods and fresh vegetables.

South East Air Lines Moves to Charlotte, N. C.

South East Air Lines, Inc., which began non-scheduled intrastate passenger and cargo service with Cessna planes recently, has moved headquarters from Gastonia, N. C., to Douglas Airport, Charlotte.

Company announced it will provide connections with Asheville for Charlotte passengers intending to fly on PCA and Delta to northern and western destinations.

On Dec. 1, the company began a pickup and ground delivery service for its cargo customers. W. C. Teague is vice president—operations.

PLANS CULVER FLEET:

Don Mitchell, president of Ypsilanti Furniture Co., Ionia, Mich. (left), has ordered the first Culver Model V in Michigan and says he plans a fleet for the company's traveling salesmen and executives as soon as deliveries can be made. Mitchell believes that with a personal plane each of his men can do a better sales job and cover a larger territory than is possible with ground transportation. Shown with Mitchell is Gerald Francis of Culver.

CAA Predicts Boom In Charter Services

Utilization of about 29,000 aircraft and employment of approximately 34,000 persons forecast by 1955.

A many-fold increase in the next ten years in the special services rendered by charter operators and federally uncertificated air carriers has been forecast by CAA. Utilization in 1955 of about 29,000 aircraft and employment of approximately 34,000 persons is anticipated by the agency.

While this employment would be a considerable jump above the pre-war figure of 3,100 for charter operations alone, it may be conservative, for the difficulty of defining precisely what constitutes charter and uncertificated operations is reflected in the CAA report on "Civil Aviation and the National Economy."

▸**Calculations** — Two bases are used by CAA in calculating what may be the special air services picture ten years hence. One is figuring employment in non-scheduled operations as 25 percent of that on domestic scheduled airlines, the other is estimating that charter operations constitute 36 percent of "commercial" flying. That term includes instruction, sightseeing, crop dusting, aerial photography and other contract work.

Applying the scheduled carrier formula to expected 1955 ton-miles, CAA predicts non-scheduled operators will employ directly 28,300 persons, with 7,100 others deriving employment from the operations. Applying it on a crew-size basis, the estimates are 27,500 and 6,900. On a dollar-volume basis, the figures are 26,400 and 6,600. In using the commercial flying formula, CAA estimates that in 1955 basic employment in that phase of the industry would be about 95,000 and charter's share would be roughly 34,000.

▸**Production** — Commercial air operations in 1955 would utilize about 80,000 planes annually, and stimulate an annual production of approximately 40,000 aircraft for use in that work. The 36 percent ratio of charter to commercial would mean that charter operators would use 28,800 aircraft and inspire production of 14,400 a year.

Pre-war peak in charter operations was reached in 1939, when 11,087,000 miles were flown. That was a jump of nearly 3,000,000 miles from the 1938 figure.

▸**Comparison**—The figures on the number of passengers carried in non-scheduled operations might offer a commentary both on the growth of scheduled air carriers, and on the extent to which the early itinerant flyer, by promoting aviation, fed passengers to the airlines. In 1930, passengers in non-scheduled operations reached a peak of 1,840,492, slightly more than 100,000 above 1929.

In 1931, however—while the airlines showed a sharp increase—non-scheduled passengers dropped some 400,000. The next year, the total was 679,000. There were year-by-year non-scheduled increases after that, but they did not keep up proportionately with the passenger increases on scheduled airlines. The total of revenue passengers on scheduled airlines did not overtake the number carried in non-scheduled until 1938.

CHARTERS PLANES:

Typical of the increasing use of chartered planes for sales work is that of Thomas F. Hale, Jr., (right), vice president of Pathescope Co. of America, Inc., producers of industrial films. Hale charters aircraft to reach off-line points or when he is unable to confirm airline space. The company reports it intends to expand aircraft usage to include production-location trips as well as sales missions. "Projection equipment can be handled easily, the time saved more than compensates for the apparently extra cost of the travel, and scheduling of trips can be arranged much more freely," Hale said.

Army Sources Indicate Dropping of ODT Order 58 by April 1

Space requisition would be abandoned two months earlier than anticipated; plan for airline use of C-47's and C-54's on loan probably will be shelved.

By MERLIN MICKEL

Prediction that April 1 will mark the discontinuance of ODT Order 58, under which 70 percent of the space on commercial planes eastbound from the West Coast is reserved for returning military personnel, was made late last week by Army sources.

This will mean termination of the space requisition and the return of the airlines to full civilian operation two months earlier than was anticipated at the outset of the program Dec. 3.

▸**Extra Planes**—Simultaneously it was disclosed that plans to augment commercial planes available for troop movement with C-47's and some C-54's loaned from the Army likely will be dropped. This suggestion came after it appeared that Order 58 would provide only 20,000 to 21,000 seats a month, against ODT's estimate of 24,000 and Air Transport Association's forecast of 25,000. Altogether, with Order 58 and Army contracts under the "trans-con" project, the airlines are moving about 37,000 military personnel per month.

Army Transportation Corps expects that by mid-March the military movement will be handled by rail almost entirely. By that time, 1,200 troop sleepers are to be available. These have been held up for the most part by a strike at a plant manufacturing beds for the cars. Some were put into service with GI bunks furnished by the Quartermaster Corps. There also has been a shortage of troop kitchen cars, but 400 of these are to be ready by the end of this month, releasing baggage cars that have been put to this use in the interim.

▸**Peak Load**—Peak of the eastbound movement comes in December, January and February. ODT expects the westbound movement of troops from the East Coast to be virtually concluded by the end of January. Total arrival of Army and Navy personnel on their way home at both coasts is estimated at 1,028,000 for December.

Suggestion that the Army might make available C-47's and possibly C-54's to augment the trans-con project officially was said to be still under consideration. Best information indicated, however, that it had been dropped because the airlines would be unable to provide and train crews before the need for the operation had passed. The carriers were said to be unwilling to undertake the burden without a 12-month contract.

Eastern Asks Routes Across Continent

Eastern Air Lines, in a pretentious application filed recently with the Civil Aeronautics Board, is seeking an "all-southern transcontinent route" with a direct link to Puerto Rico.

The proposal aroused speculation of a far-sighted attempt on the part of EAL to offset possible effects of a Mid-Continent-American merger. Approval of the merger by CAB would put American into New Orleans and provide that carrier with an extensive north-south route feeding into its transcontinental system at several points.

The new transcontinental service would be effected through extension of EAL's present system to San Francisco via two routes, one from its present western terminus at San Antonio and the other from Beaumont-Port Arthur, Tex. Also sought in the application are segments directly connecting New Orleans and Tampa, Miami and San Juan.

▸**Basis**—EAL points out that the new route, if granted by CAB, would provide many cities with their first one-carrier transcontinental service and meet the needs of the South for the service currently unavailable because "other transcontinental air routes funnel into a relatively few cities in the northeastern section of the nation." In addition, connections for the Pacific and Orient would be available at the West Coast and for South America, Africa and the Mediterranean area at Miami and San Juan.

EAL proposes operations with a combination of Douglas DC-3's and DC-4's, Lockheed *Constellations*, and Martin 202's. Flight between San Juan and San Francisco, EAL says, could be accomplished in 22½ hours and from Miami to San Francisco in 17½ hours. Using *Constellations*, the latter time could be cut to eight hours.

Air Service Agreement

An air agreement has been signed between Greece and Great Britain, under which airlines of each nation can run two trips per week between Athens and London. The British end of the servire will be conducted by British Overseas Airways Corp., operating over one route from London to Vienna, Belgrade and Athens, and another from London to Marseilles, Genoa, Naples and Athens. BOAC is expected to inaugurate service early next year. The Greek routes will be announced later.

FROM CONGRESS TO ATA: *Rep. Robert Ramspeck, who leaves Congress the end of this month to become executive vice-president of the Air Transport Association, is spending what spare time he has during the intervening weeks familiarizing himself with airline problems and ATA functions.*

AAA Gets Canadian-built Ship: *A Noorduyn Norseman V of the type shown here was recently purchased by All American Aviation, pickup airline, which used it in a pickup demonstration for Canadian Government officials at Ottawa. The ships are built at Montreal.*

AAA Used *Norseman V* In Ottawa Demonstration

All American Aviation's recent demonstration of pickup operation for Canadian air, transport and post office officials employed a Noorduyn *Norseman V* aircraft of Canada manufacture recently acquired by AAA for use on its Pennsylvania mail runs.

The *Norseman*, made by Noorduyn Aviation Ltd. of Montreal, was used extensively by the Army during the war for pickup, both abroad and at depots in this country. It is said to have a capacity of 750 lbs. greater, and be about 20 mph. faster, than the Stinson *Reliants* that have been used by All American. No further manufacture of the *Reliants* is contemplated.

▸ **Production**—Noorduyn is building the *Norseman V*, a 10-passenger cargo and passenger transport, on a three-a-month schedule. Prewar average was one a month. Several of the ships have been delivered to Canadian operators.

TWA Sets Precedent In Debenture Sale

TWA's sale last week of $30,000,000 of 10-year three percent debentures to the Equitable Life Assurance Society was the first long-term unsecured credit to a major air carrier.

Proceeds of the sale will be used chiefly for purchase of 36 Lockheed *Constellations*. Costing about $750,000, the planes, TWA says, will be capable of earning $2,650,000 in gross revenue per year.

Airport Purchase

Curtiss-Wright Airport in Northwest Baltimore has been purchased by local interests for a reported $240,000.

The group is headed by Capt. W. D. Tipton, currently in the AAF at Colorado Springs, Colo., and operator since 1933 of a sales service and flight training school at the field. Tipton will become president of the corporate set-up for future operations. The field will be operated by Chesapeake Aviation Corp., and sales handled by Chesapeake Aircraft Sales Co. A holding company, Pimlico Airport Corp., will be created.

Plans call for improvements to the turf landing area "sprucing up" the main buildings, and construction of 50 to 100 individual hangars.

Airline Statistics Reflect Easing Of Equipment

General easing of the airline equipment situation, together with continued high utilization of equipment, is reflected in Civil Aeronautics Board statistics of the 19 domestic carriers for the nine-month period ended Sept. 30.

Revenue passenger-miles flown showed a 55.93 percent increase over the corresponding period in 1944, totaling 2,499,066,348, compared with 1,602,723,926. Revenue miles flown increased 53.38 percent, from 101,627,081 through Sept. 1944 to 155,851,649 in the same period this year. Mail and express ton-miles were up 40.21 and 43.93 percent, respectively, the former increasing from 36,090,904 to 50,602,340 and the latter from 12,401,350 to 17,849,332.

▸ **Load Factor**—With the airlines flying 94.85 percent of scheduled mileage through Sept. 1945, a load factor of 88.70 percent was attained, compared with last year's figure of 90.14 percent. Average available seats for the period increased from 19.02 in 1944 to 19.58.

Average airplane load was 17.37 passengers, 884.3 pounds of mail, and 229.4 pounds of express, against comparable 1944 figures of 17.15 passengers, 747.7 pounds of mail, and 244.3 pounds of express.

Tipton Says He'll Stay With ATA 'Indefinitely'

Stuart G. Tipton, acting president of the Air Transport Association, said last week that he is rejecting offers of jobs outside the organization and will stay with ATA "indefinitely."

He joined the Association as general counsel, and became acting head after the death of Col. Edgar S. Gorrell last March. Several days ago it was reported that he might withdraw to take a position with an airline or enter private practice.

ATA Maintenance Talks Expected To Draw Crowd

Early prospects are that the first post-war meeting of the engineering and maintenance conference of Air Transport Association, with discussions of new equipment one of the main topics on the agenda, will draw more than 300 and create more than usual interest.

The sessions will be held the last three days of February, probably in Chicago. Most recent meeting of the group took place in that city in August, 1944, with about 150 attending.

UAL Authorized to Serve Ogden, Utah, On AM 1

United Air Lines was authorized last week by CAB to serve Ogden, Utah, on its transcontinental route AM 1. The action gives Ogden new direct east-west service, in addition to north-south service currently furnished by Western Air Lines.

The service was recommended originally in the West Coast case

PICAO Council Recesses, Picks Montreal for Assembly Session

Sets in motion machinery for calling of regional meetings on air navigation, decides to organize new technical committee on communications and radio aids.

The Interim Council of the Provisional International Civil Aviation Organization (PICAO) has recessed until late next month after a closing all-day meeting which finally decided on Montreal as the place for next May's meeting of the 39-nation assembly.

Before packing up, PICAO's Council also:

▸ Set in motion machinery for the calling of regional meetings on air navigational facilities in three areas of the world.

▸ Decided to form a new committee of technical experts on communications and radio aids to air navigation.

▸ Changed the official title of technical study groups from "subcommittee" to "division."

▸ Accepted the finance committee's report, which noted that PICAO's expenses to date are "substantially under" budget estimates.

Decision to hold the first meeting of the Assembly in Montreal came after the representative of Egypt postponed his invitation to Cairo, informing the Council that the climate there was not particularly pleasant in late spring, and after Dr. Albert Roper, secretary-general, had presented a strong recommendation for Montreal on practical grounds. Dr. Roper cited the difficulty of transporting enough secretariat and documents for a meeting elsewhere.

▸ **Request**—To implement the previously adopted principle of regional organization, PICAO requested the governments of the U. S., France and Egypt to convene meetings after Eire's North Atlantic meeting next year. The U. S. will call the conference for the Caribbean area, France for the European-Mediterranean, and Egypt for the Middle East region.

The Council will name states to be invited on the basis of territorial location, actual or prospective operation of airlines within a given region, and provision of air transport facilities within the region. Any nation may attend as observer, but only member-states named may vote on decisions.

These meetings are intended to develop into permanent regional organizations to study air route problems and seek agreement among states concerned in various questions.

▸ **Radio Aids**—PICAO's new technical division was set up on the recommendation of Dr. Edward P. Warner, council president, for a more detailed study of communications and radio aids to navigation than had been possible during the recent meeting of the communications group.

"Nothing is more important . . than that agreement should be reached among all states on the type of radio aid that is to be made available for en route guidance and for approaches and landings," said Dr. Warner.

"Without such agreement, international airlines run the risk of having to provide duplicated or multiplied instrumentation in their aircraft in order that a diversity of aids may be used at various portions of the route—or at various landing places."

▸ **Some Progress**—Progress already had been made, Dr. Warner added, but it was necessary that discussions be "conducted on a purely technical level among men who can be assumed to be expert in the detailed technology of radio and radar and who are intimately familiar with the existing state of development of the art in the laboratory, the factory and the field."

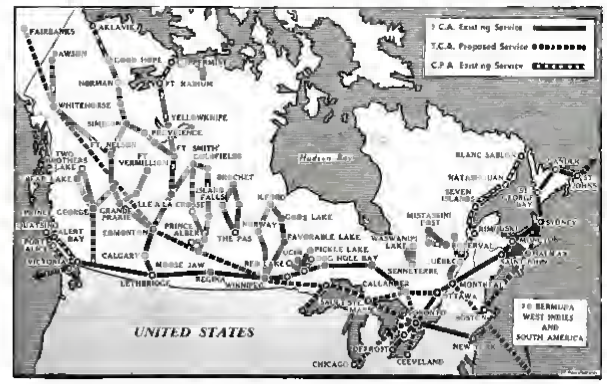
Substitution of the division designation for that of a subcommittee was the result of a feeling that the importance of the work being carried on by these groups might be minimized to a degree by continued use of the prefix "sub".

Sandringham Launched

The Short *Sandringham*, first big British flying boat since the end of the war, was launched Nov. 28 by the Ministry of Civil Aviation.

Civil version of the *Sunderland*, the ship weighs 56,000 lbs. fully loaded. It will seat 24 and sleep 16 and has a crew of seven. Mail and freight is stowed in fore and aft compartments.

▸ **Power**—Power is supplied by four Bristol *Pegasus* engines. Cruising speed is about 190 mph., range about 2,533 miles. Wing span is 113 ft., length 85 ft. and height nearly 16 ft.



TCA EXPANDING:

Extensions planned by Trans-Canada Airlines to U. S. cities, in Canada, and internationally are shown graphically on this map comparing TCA and Canadian Pacific Air Lines systems. TCA is owned by government-owned Canadian National Railways, Canadian Pacific by Canadian Pacific Railways. The latter operates 57 of the 68 routes nat on TCA. A divesting order separating both airlines from the rail companies is contemplated.

National-Caribbean Deal Is Opposed

Approval of National Airlines control of Caribbean-Atlantic Airlines would be tantamount to surrendering one of CAB's major regulatory powers, the Board was told during oral argument in the case last week

Arguing for a firm stand in disapproving the proposed acquisition, Public Counsel Louis W Goodkind told CAB any other action on its part would "undermine the integrity" of the Civil Aeronautics Act in view of a "deliberate" violation by the two carriers He reminded the Board that it cannot terminate an acquisition of control since its powers in this respect are not continuing Goodkind also took issue with the recommendation of Examiner Ferdinand D Moran (AVIATION NEWS, Oct 5) that an investigation of Caribbean-Atlantic be instigated to determine its fitness, willingness and ability to perform the service for which it is certificated It does not appear from the Act, he said, that the Board has such power.

▸ **Warning**—A warning of further labor trouble in the airline industry, if control is approved, came from John M Dickerman, representing the Air Line Pilots Association He informed CAB that NAL's pilots have agreed to strike if George T Baker, NAL president, refuses to sign an agreement protecting their interests in the foreign and domestic operations

John W Cross, representing NAL, denied the charges of Public Counsel and the Examiner that the carrier had actual and legal control of Caribbean - Atlantic, stating that all of NAL's actions were taken pursuant to the leasing agreement recommended for approval Furthermore, he contended, CAB cannot refuse to approve the acquisition if it is found to be in the public interest, regardless of whether the Act had been violated The Board does have the power, he said, to apply criminal penalties

Rickenbacker Retained

Eastern Air Lines' directors have renewed for a 10-year period the management contract of Capt Eddie Rickenbacker, president and general manager of the company since it was organized in 1938 Rickenbacker became general manager of Eastern Air Lines Division of North American Aviation in 1934 The present company was organized in 1938

New Plane Allocations

Three additional recipients of planes in the 21st allocation by Surplus Property Administration have been announced. Douglas Aircraft gets a C-54A, Compania Argentina de Navegacion Dodero two C-54B's, and TATA Airlines (India) two C-53's.

Earlier it was disclosed that 27 C-54B's were distributed to U S. lines in the allocation, and four to foreign lines

PCA Forecasts Expansion

Indicative of expansion anticipated by the nation's airlines are forecasts of Pennsylvania-Central Airlines

Based only on its present route system, the figures presented do not consider expansion that would follow CAB approval of the proposed Northeast-PCA merger or other domestic or international route applications the Board might grant

Tabulation yields these comparative figures:

	Jan 1, 1945	Apr 1, 1948	Jan 1, 1948
Employees	1,800	4,981	8,872
Planes in service	18 DC-3	26 DC-3	10 DC-6
		15 DC-4	35 202's
		5 DC-4 cargo	10 DC-4 cargo
Daily scheduled plane miles	23,881 pass	69,080 pass.	68,950 pass
		8,775 cargo	17,550 cargo
Daily scheduled seat miles	497,300 pass.	2,277,805 pass.	3,972,000 pass
		614,250 cargo	1,226,500 cargo
Daily revenues	$19,460	$88,339	$143,445

NORTHROP CONVERTS C-47'S FOR UNITED:

Photo at left shows one of 34 C-47 Army transports which Northrop Aircraft Co will have converted by February for commercial transport use by United Air Lines Other picture shows interior of one of the ships after conversion Each conversion job takes about three weeks

"Constellation," Certificated, Enters Commercial Use: *The Lockheed Constellation, newly certificated by CAA for commercial use, was used by TWA last week on a "preview" flight from Washington to Paris. The 300-mph. ship, dubbed the "Paris Sky Chief," is shown above on its delivery flight*

TWA *Constellation* Flies Paris Route

Time in air is 12 hrs. 52 min. on "preview flight"; CAA grants approved type certificate

Disclosure that the Civil Aeronautics Administration has granted an approved type certificate to the Lockheed *Constellation* came last week about the time TWA set one of the 300-mph. ships down at Paris after half a day's flight from Washington.

Actual flying time for the trip, a "preview flight" of the commercial service TWA expects to start about Dec. 20, was 12 hrs. 52 min. Elapsed time of 14 hrs. 48 min. was considerably less than the 18 hrs. TWA had estimated. One hour 56 min. ground time was spent at Gander, Newfoundland, and Shannon, Ireland, only stops between Washington National Airport and Orly Field.

▸**Speed**—TWA calculated average speed at 303 mph. The ship was to leave Paris Dec. 9, returning to Washington today, Dec. 10. Washington-Paris distance is 3,840 miles. Speed on the trip over compared with about 335 mph. for the *Constellation* that made a record-breaking 2,300-mile cross-country flight from Burbank to Washington in April, 1944.

Passengers on the special trans-Atlantic flight included Postmaster General Robert Hannegan; Sen. E. V. Robertson (R., Wyo.), Senate Commerce Committee member, Rep. Clarence Lea (D., Calif.), chairman of the House Interstate and Foreign Commerce Committee; Rep. Clarence Cannon (D., Mo.), chairman of the House Appropriations Committee; Gael Sullivan of Chicago, Second Assistant Postmaster General; William A. M. Burden, Assistant Secretary of Commerce for Air; Francis Lacoste, Minister Plenipotentiary of France, Sean Nunan, Counselor of the Irish Embassy; A. S. Koch, CAA's Assistant Administrator for Field Operations, Henri Lesieur, general manager in North America for Air France; press representatives, and others.

The ship was christened in Washington by the wife of Henri Bonnet, French ambassador to the U. S. It carried 2,000,000 units of penicillin, donated equally by the mayors of Boston and Chicago and assigned to Dublin and Paris.

▸**Tests Passed**—The *Constellation*, of which TWA has received two and expects more soon, is the first post-war 300-mph transport with pressurized cabin to be accepted by CCA for immediate commercial passenger service. It passed flight performance tests in California in the record time of 27 flying hours. Its certification permits it to operate in and out of any airport now served by standard twin-engine airplanes.

Flight tests were supervised by Herb Toomey, CAA chief flight engineer for the Los Angeles area, and C. L. Johnson, Lockheed's chief research engineer. Joe Towle, Lockheed's chief pilot; Toomey, and CAA pilots flew the ship. Previously the military version of the *Constellation* had broken existing records for both the Army accelerated service tests and the Army performance test.

▸**Performance**—CAA tests, including takeoffs at full gross weight of 80,000 lbs., takeoffs with one engine cut out, and sudden stops after taxi runs up to takeoff speed, were conducted at Lockheed Air Terminal.

The plane landed over a 50-ft. obstacle and come to a dead stop in 2,400 ft. Three-engine takeoffs at 90,000 lbs. gross weight were made, clearing a 50-ft. obstacle after 3,620 ft. from the start of the run.

Although CAB regulations no longer place an 80-mph. limit on landing stall speed for commercial transports, low-speed tests showed the ship's ability to comply with such a restriction. Particular attention was paid during low speed test to suitability of the plane for blind flying.

The tests established normal gross landing weight of the transport at 75,000 lbs. One test landing was made at a weight of 82,000 lbs. Automatically-timed cameras provided a photographic record of all instrument readings during the tests.

Scandinavian Cooperation Not Shown At Hearing

Concrete information on the avowed cooperative arrangement under which the Scandinavian nations will operate trans-Atlantic air service failed to materialize at a recent Civil Aeronautics Board hearing on Swedish Intercontinental Airlines' (SILA) application for a foreign air carrier permit to operate between Stockholm and New York and/or Chicago.

Tore Nilert, U. S. representative of SILA, indicated only that an agreement was under consideration and probably would not be consummated before next spring. SILA, he stated, will operate independently in the meantime. Questioning by Public Counsel developed, however, that SILA will be assisted in its operations by the Swedish A. B. Aerotransport (ABA). The latter will furnish operating personnel and facilities on a cost basis.

▸**Routes**—Question of whether SILA is seeking two routes arose when Nilert stated that the southern route—said in the application to be an alternate depending on weather—would be operated if traffic experience proved it more feasible than Iceland-Labrador-Canada routing. This factor led Public Counsel to insist on a report from Examiner Barron Fredricks so that exceptions might be made if they should be considered necessary.

British Stand On U. S. Planes

Lack of suitable equipment is Britain's chief problem in starting long-range air services, and it has not been clear why U. S. surplus C-54's have not been acquired for use until new Empire aircraft are ready.

Spokesmen on British policy say there are several reasons why C-54's are not called for. Spares are difficult to obtain, they say. The British have just returned to the U. S. government 11 C-54's, including the one Churchill used.

▸**Funds**—Another obstacle is lack of dollars for imports, the British have to be very careful what they buy with their limited supply of dollars.

Asked whether they were disinclined to establish American equipment on their lines, setting a precedent which might call for more, they said naturally they would not like to set up such a disadvantage to themselves, and would prefer to use their own.

They indicated the Tudor I, an airplane designed specifically for conditions on the North Atlantic, will be delivered in adequate numbers early next year.

▸**Agreement**—Adolph Berle said at the Chicago conference that any country in agreement with U. S. air policy could purchase U. S. surplus airplanes. Obviously the British are not in agreement on all points with the U. S., but spokesmen felt sure they would be privileged to buy either used or new airplanes here if they wished.

Eastern And Delta Win Maintenance Awards

Eastern Air Lines and Delta Air Corp. last week received awards made jointly by *Aviation* and *Air Transport* magazines for outstanding maintenance and performance in 1945. Ceremonies were held in Miami and Atlanta, where Eastern and Delta, respectively, have operations headquarters.

Considered top prize for ground crew personnel, the awards were in tribute to "the unsung men and women who kept the planes in shape for safe, efficient flying." Eastern won a plaque among lines with more than 10,000,000 revenue plane miles annually, Delta among the carriers up to that figure.

Eastern, Delta Awards: *This plaque went to Eastern Air Lines last week for its 1945 maintenance record. Delta Air Lines received one awarded a carrier of up to 10,000,000 revenue plane miles. The awards were made by Aviation and Air Transport magazines.*

▸**Awards**—H. G. (Hub) Lesley, Eastern's superintendent of maintenance, accepted his line's award from Leslie E. Neville, editor of *Aviation*, which originated the citation in 1936. S. L. Shannon, vice president, operations, was among those at the banquet for Eastern's chief maintenance and overhaul personnel.

The award to Delta was presented by John Foster, jr., managing editor of *Aviation*, and accepted by Delta's superintendent of maintenance, G. J. Dye, at a banquet in Atlanta.

New Orleans Airport Set To Open January 13

The last unit in New Orleans' air terminal system—Moisant International Airport—will open Jan. 13, according to Aviation Director D. O. Langstaff. Ceremonies will begin Jan. 12 with a parade and dinner. The dedication the following day is to be attended by federal, state and city officials, air line executives, foreign dignitaries, Army and Navy representatives and delegates from civic organizations. New Orleans is served by Eastern, Chicago & Southern, Delta, Mid-Continent, National and Pan American.

▸Covering 1,360 acres, the port has three 5,000 ft. and one 7,000 ft. concrete runways.

Joint Failure Blamed For South Carolina Crash

Responsibility for air collision of an Eastern Air Lines DC-3 and a USAAF A-26 near Florence, S. C., last July was placed equally on pilots of both planes in a Civil Aeronautics Board accident report issued last week.

While the accident probably was caused by failure of each pilot to see the other plane in time to avoid collision, CAB said, contributing factors were the airline pilot's lack of vigilance and deviation from the airway in vicinity of an active AAF base and the Army pilot's maneuver restricting his vision in an undesignated practice area.

EAL's flight was headed for Columbia, S. C., on its Boston-Miami run. One DC-3 passenger and two occupants of the Army plane were killed.

Albuquerque Expansion

Albuquerque, N. M., is looking to expansion of civilian flying to offset the prospect that Kirtland Field, its military air base, soon may be inactivated. Authorities are studying the possibility of enlargement of facilities of the two lines, Continental and TWA, now serving the city; the acquisition of service by additional lines, and perhaps a large plane repair depot. Nine airlines, including five interstate carriers, have applied for permission to serve Albuquerque. Private and charter flying there is expanding. The Army used Kirtland Field through the war for bombardier and four-engine schools, and to train B-29 combat crews.

UAL, Sacramento Resume Airport Expansion Talks

United Air Lines and Sacramento, Calif., city officials have resumed negotiations for improvements at Sacramento's airport following passage in November's election of a charter amendment allowing leasing of city property to a maximum of 25 years.

With the original limit at five years, United had hesitated to spend money in developing a terminal in Sacramento. A lease of at least 15 to 20 years on land at the city airfield was desired.

▸**Plans** — Sacramento's slice of $60,000,000 for United's national expansion program would be $100,000 for construction of a new terminal and improvement of airport facilities. Company negotiations are being handled by Max King, district traffic manager for the carrier.

IN ECONOMIC BUREAU:

Robert W. Oliver, former attorney with CAB's Economic Bureau and specialist on domestic and international air mail rates in the office of General Counsel, has been named Assistant Director of the Economic Bureau. Recently discharged from the Navy with the rank of lieutenant, he served two years as a legal and liaison officer in the Naval Air Transport Service in charge of Navy contracts with commercial airlines for air transport services.

National, NWA Await Ruling on Newark

National and Northwest Airlines last week were awaiting expected favorable Civil Aeronautics Board action designating Newark a co-terminal with New York on NAL's AM 31 and NWA's AM 69.

The similar cases were submitted directly to the Board following brief hearing before Examiner Frank J. Trelease, Jr., as examiner's reports, briefs, and oral argument were waived.

▸**Tangle** — The carriers were prompted to seek expeditious action because of their uncertain, tangled status at New York's airports. La Guardia Field, where neither holds a lease for a stated term, is being closed to them. Idlewild Airport, their new base of operations in New York, is currently without facilities for handling mail and express and not being used by connecting carriers.

Serving the metropolitan New York area through Newark, the carriers pointed out, would resolve all temporary difficulties in the shift from La Guardia to Idlewild, in addition to offering long-run advantages of improved service and elimination of traffic congestion so frequent in inclement weather.

▸Meanwhile, Colonial Airlines, only other carrier certificated into New York and not Newark, has applied to CAB for such privilege.

CAB ACTION

The Civil Aeronautics Board:

• Denied All American Aviation temporary exemption from Section 401 of Civil Aeronautics Act that would have permitted AAA to operate combined passenger-pickup service over two segments of AM 40 between Pittsburgh, Pa., and Huntington, W. Va.

• Dismissed, at applicant's request, application of Empresa Aerea Inter-Americana, S. A., for amendment of its temporary foreign air carrier permit to allow transportation of mail from Cuba to U. S.

• Granted Pan American Airways a temporary exemption order, until March 31, 1946, to permit re-routing of landplane service between New York and Lisbon via Newfoundland and Eire and temporary suspension of personal seaplane service via Bermuda and Azores.

• Permitted Northwest Airlines to inaugurate non-stop service between Minneapolis-St. Paul, Minn., and Spokane, Wash.; Minneapolis-St. Paul and Seattle, Wash., and Seattle and Billings, Mont., on AM 2.

• Permitted All American Aviation TWA and United Air Lines to serve Philadelphia through Southwest (Municipal) Airport; Delta Air Lines to serve Greenville-Spartanburg, S. C., through Greenville Municipal Airport and Spartanburg Memorial Airport; National Airlines to serve Wilmington, N. C., through Bluethenthal Army Air Field.

• Granted Woodley Airways permission to intervene in nine Alaskan cases involving primarily non-scheduled and charter service and denied Woodley intervention in one other.

CAB SCHEDULE

Dec. 10 Hearing on Aerovias Nacionales de Colombia, S. A. application for foreign air carrier permit (Docket 1038.)

Dec. 10. Exchange of exhibits in Pan American Airways' trans-Atlantic route amendments case (Docket 2076.)

Dec. 10. Oral argument in American Airlines Oklahoma City-Tucson and Oklahoma City-Phoenix non-stop service case. (Docket 1805.)

Dec. 11 Hearing in Royal Dutch Air Lines (KLM) and Royal Netherlands Indies' Airways (KNILM) foreign air carrier permit case. (Docket 1277.)

Dec. 12. Oral argument in South Atlantic case. Postponed from Nov. 12. (Docket 1271 et al.)

Dec. 17. Hearing in Mississippi Valley case to be reserved. (Docket 648 et al.)

Dec. 17. Hearing in route consolidation case. (Docket 332 et al.)

Dec 17. Exchange of exhibits in Mid-Continent-American merger case. (Docket 2088.)

Dec 28 Exchange of exhibits in Middle Atlantic case. Postponed from Dec. 14. (Docket 674 et al.)

Jan 2. Briefs due in Great Lakes Area case. Postponed from Dec 3. (Docket 535 et al.)

Jan. 2. Exchange of exhibits in Aerovias Brasil, S. A., temporary foreign air carrier permit case. (Docket 2107.)

Jan. 3. Hearing in Pan American Airways trans-Atlantic route amendments case (Docket 2076.)

Jan. 4 Exchange of exhibits in Kansas City-Memphis-Florida case. Postponed from Nov. 1 and Dec. 7. (Docket 1051 et al.)

Jan. 7. Hearing in Aerovias Brasil, S. A. temporary foreign air carrier permit case. (Docket 2107.)

Jan. 7. Oral argument in New England case. (Docket 809 et al.)

Jan. 14. Exchange of rebuttal exhibits in Middle Atlantic case. Postponed from Dec. 28. (Docket 674 et al.)

Jan 14 Exchange of rebuttal exhibits in Mid-Continent-American merger case. (Docket 2088.)

Jan 21. Rebuttal exhibits due in Kansas City-Memphis-Florida case. Postponed from Nov. 26 and Dec. (Docket 1051 et al.)

Jan. 21. Hearing in Mid-Continent-American merger case. (Docket 2088.)

Jan. 28. Exchange of exhibits in Universal Air Travel Plan case. Postponed from Dec. 3. (Docket 1939.)

Jan 28 Hearing in Middle Atlantic case. Postponed from Jan. 14. (Docket 674 et al.)

Jan 31. Comments due on proposed new Part 42, Civil Air Regulations, non-scheduled air carriers certification and operation rules. Extended from Oct. 1.

Feb 5. Hearing in Kansas City-Memphis-Florida case. (Docket 1051 et al.)

Feb 18. Exchange of exhibits in Boston-New York-Atlanta-New Orleans case. (Docket 730 et al.)

Feb 18. Exchange of exhibits in Pan American Airways application for domestic routes. (Docket 1803.)

Feb 18. Hearing in Universal Air Travel Plan case. Postponed from Dec. 17. (Docket 1939.)

Mar. 1. Exchange of rebuttal exhibits in Boston-New York-Atlanta-New Orleans case. (Docket 730 et al.)

Mar. 11. Hearing in Boston-New York-Atlanta-New Orleans case. (Docket 730 et al.)

Mar. 18. Rebuttal exhibits due in Pan American Airways application for domestic routes. (Docket 1803.)

Apr. 1. Hearing on Pan American application for domestic routes. (Docket 1803.)

The Budget Bureau and Aviation—III

THE PUBLISHED hearings of a House Subcommittee on Appropriations for the first deficiency appropriation bill for 1946 furnish new evidence that the Bureau of the Budget is unnecessarily retarding aviation progress.

The Bureau of the Budget sent to the committee a budget item for Washington National Airport, operated by CAA, of $2,833,000 for four hangars. Washington National Airport's income last year was $594,000, or about $50,000 more than the appropriation Congress made for it.

Mr. Hervey Law, up-and-coming administrator of the airport, in his budget request sent to the Bureau, requested five new hangars. Not only did Mr. Law assure the Budget Bureau that the initial construction and maintenance costs of all five hangars would be repaid to the government in full. He assured the Bureau that the government would get interest on its investment.

Extracts from the testimony are interesting:

Mr. Cannon: You say you must have these additional hangars if you accommodate all of your applications? Mr. Law: Yes sir.

Mr. Cannon: Those applications are permanent and will continue? Mr. Law: Yes sir. . . . I have here definite commitments from the airlines for five hangars to be built, executed in writing, and committed for the new hangars on a basis of amortization in 40 years, 2 per cent interest on the balance, and the cost of maintenance. If you would like to see them, I have the definite commitments for the five hangars here.

Mr. Woodrum: What provision, if any, are you making for civilian planes? Mr. Law: That is why I wish to have five hangars constructed at this time. While there are only four in this appropriation, five hangars, as I stated earlier, are definitely needed to meet commitments of the airlines. It is our idea to take the present Army hangar, when they release same, to use for CAA planes and itinerant planes.

Mr. Woodrum: There ought to be provision made for civilian planes there, unless you want to build an auxiliary airport. Mr. Law: That is right. That is why I definitely need these five hangars, rather than just the four in this appropriation. And I would like you to review these commitments that we have, based on this plan.

Mr. Woodrum: I am sure you can rent every one you get and rent them on an amortized basis. Mr. Law: Absolutely.

Mr. Woodrum: And it is actually a good investment. Mr. Law: Yes, sir. And it seems if we can build five that we could build them cheaper than if we build the four listed here and one hangar later and still have the Army hangar for CAA planes and itinerants.

Mr. Rabaut: You have here a request for four hangars, and when you were talking to us you indicated necessity for five. Did you ask the Bureau of the Budget for five? Mr. Law: Yes, sir.

Mr. Rabaut: What reason did they give for turning you down? Mr. Law: No reason.

Mr. Rabaut: How much would the extra hangar cost? Mr. Law: A little over $700,000. As I say, I have a definite commitment for the hangar.

Mr. Rabaut: It would be a paying proposition? Mr. Law: Yes, sir.

Mr. Rabaut: It is a building that is really necessary? Mr. Law: Absolutely. We must have it.

How would the Budget Bureau save federal money on its cut in this budget item? Why does it muff a rare opportunity to encourage a profitable federal investment and at the same time recognize the CAA's obligation to Congress to encourage, develop and promote aviation?

Contrast in Progress

THE SAME edition of a recent Washington newspaper carried these advertisements which dramatize the relative progress of the old, established railroads and the vigorous, independent air transport industry.

The railroads continue their campaign to "integrate" all modes of transport to "achieve" general efficiency, economy and better public service. Of course, the railroads would control such a set-up.

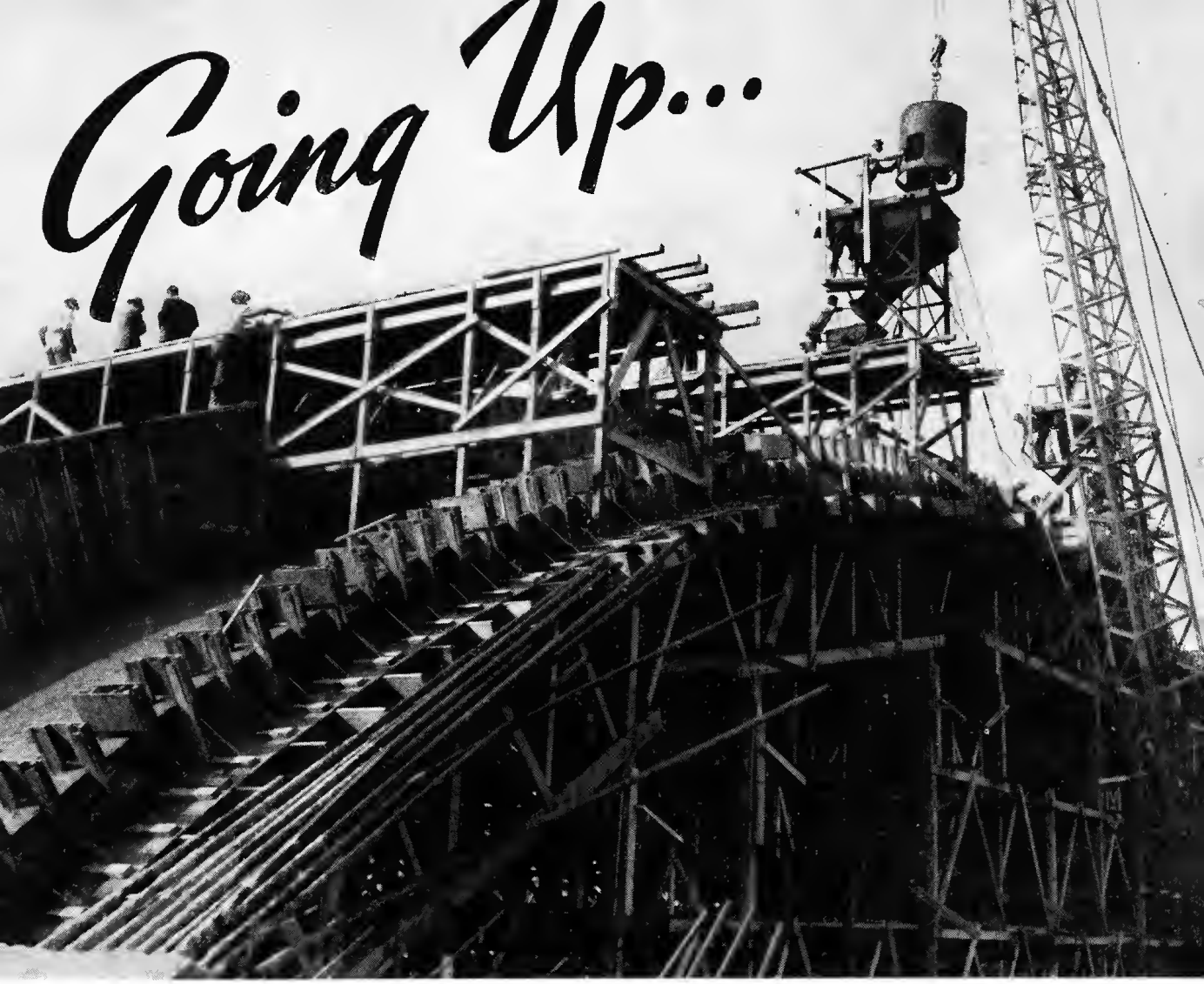
Rails first linked the East and West Coast when a golden pike was driven in Utah 76 years ago con-

necting the Central Pacific and Union Pacific. Our railroad friends like to refer to this as the forging of the first "transcontinental" railroad. Actually, there never has been a transcontinental railroad. The railroad industry has a rigid "integration" system of its own, and the western roads, the eastern roads and the southern roads have their own exclusive organizations which control competition effectively.

The result, as pointedly publicized by a new rebel group among the rails, is that the greatest railroad system of the world still has no coast-to-coast passenger service, in either coach or sleepers, despite the frequently touted Pullman system which has been used by virtually all of the large passenger-carrying railroads. The maximum benefits to the traveling public of a national pool of sleeping cars under a single management have been impossible of achievement because of the self-imposed "integration" of the railroad managements.

If the railroads have been unable to give the public a no-change coast-to-coast service since 1869, they may have a time of it in making their integration proposals sound convincing to the same public which sees before its eyes the astounding week-by-week development of our independent and unencumbered domestic and U. S. flag international airline system.

ROBERT H. WOOD



General Electric builds a new flight-test headquarters at Schenectady

Very soon now this combination hangar, laboratory, and workshop will be humming with electric power being utilized in equipment specially developed for aircraft—an inspiration for G.E.'s air-minded research workers. Here, new systems and equipment designed to make flying faster, safer, and more comfortable will be tested on planes of all types. For the first time, General Electric flight-test facilities will be concentrated under one roof, and near the parent plant where design engineers can rapidly check test results. Scheduled for test soon are many G-E products and systems that were designed during the war and are now being adapted for civilian use. They include the autopilot, d-c and a-c power systems, instruments, electronic and communication equipment, power apparatus, and, of course, aircraft gas turbines.

Although we will continue to develop equipment for the Army and Navy, a large part of our efforts will be devoted to civilian planes. G-E engineers, with their invaluable wartime experience, will be available to work with you on new developments and to show you what we have that may solve your design problems. *Apparatus Dept., General Electric Co., Schenectady 5, N. Y.*

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